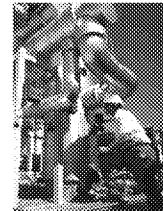
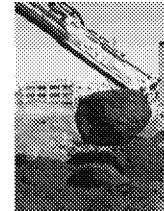
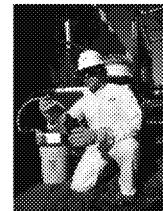
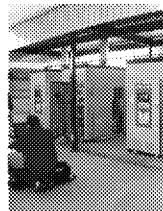
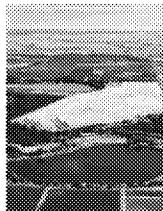


**SCS ENGINEERS**



**Phase 2 Environmental  
Site Assessment Report**

**Thomas F. Pankratz Property  
Former Madison Brass Works  
206-214 Waubesa Street  
Madison, Wisconsin 53704**

Prepared for:

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January 2015  
File No. 25212326.00 (T7)

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## SCS ENGINEERS

January 16, 2015  
File No. 25212326.00 (T7)

Ms. Brynn Bemis  
City of Madison Engineering Division  
210 Martin Luther King, Jr. Blvd., Room 15  
Madison, WI 53703

Subject: Phase 2 Environmental Site Assessment Report  
City of Madison USEPA Brownfield Assessment Grant  
Thomas F. Pankratz Property/Former Madison Brass Works  
206-214 Waubesa Street, Madison, Wisconsin

Dear Ms. Bemis:

SCS Engineers (SCS) is pleased to present the results of a Phase 2 Environmental Site Assessment (ESA) conducted at the Thomas F. Pankratz Property/Former Madison Brass Works located at 206-214 Waubesa Street in Madison, Wisconsin (Property).

The Phase 2 ESA detected limited volatile organic compounds (VOCs) in the soil, so there appears to be little, if any, environmental impact from the petroleum underground storage tank (UST) that was formerly located on the Property. The only detected NR 720 soil standard exceedance for VOCs was naphthalene detected in a boring located in the former furnace room. Much of the Property appears to have been filled with up to 4 feet of soil that contains an incidental amount of cinders. The results of this Phase 2 ESA indicate that polynuclear aromatic hydrocarbons (PAHs) associated with the cinders are present at concentrations greater than the NR 720 generic residual contaminant levels (RCLs) for direct contact. The PAH contamination is commonly encountered in portions of the Madison isthmus that have been filled. The investigation detected metals concentrations in soil in excess of NR 720 groundwater protection and/or direct contact RCLs. Toxicity Characteristic Leaching Procedure (TCLP) analysis of the soil sample from one boring location exceeded the U.S. Environmental Protection Agency (USEPA) toxicity characteristic regulatory level for lead; this soil would be classified as a hazardous waste, if excavated.

The type of soil contamination detected at the site may usually be left in place beneath buildings or below a cap of pavement or clean soil. However, any contaminated soil that is taken off site will need to be disposed in a licensed landfill. Soil containing lead concentrations that exceed the hazardous threshold would need to be treated on site prior to disposal.

Detected concentrations of VOCs and metals in groundwater were all less than NR 140 enforcement standards (ESs). Tetrachloroethene (PCE) was detected in one site monitoring well at a concentration greater than the NR 140 preventive action limit (PAL). PCE has historically been detected in this well and has been attributed to an upgradient, off-site source. Metals concentrations in excess of NR 140 PALs were also detected in site monitoring wells.



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VOCs were detected in sub-slab vapor samples collected at the site; however, no detected concentrations exceeded applicable regulatory standards.

## BACKGROUND

The Property is located in a residential and industrial area on the east side of Madison, Wisconsin (**Figure 1**). It has a single-story industrial building that is not currently in use. The parcel is identified as Tax Parcel 251/0710-053-0735-3, and is located between Lake Mendota and Lake Monona. The Property has municipal water, municipal sanitary sewer service, and natural gas. The parcel contains 0.24 acres of land.

The Property is located near the intersection of two historical railroad corridors that were constructed before 1892. The Property and two adjoining properties (the former Kupfer Ironworks and Madison Kipp Corporation) were developed for industrial use by the early 1900s. The Property was historically used as a brass foundry.

Two 1,000-gallon fuel oil USTs were removed from the Property in 1992. One tank was located beneath the building near the furnace room, and one tank was located north of the building. Petroleum-contaminated soil observed during the removal of the exterior tank was subsequently excavated, and the case file was closed by the Wisconsin Department of Natural Resources (WDNR) in 1994.

### **R e c o g n i z e d E n v i r o n m e n t a l C o n d i t i o n s**

Information obtained during the Phase 1 ESA (SCS, 2014a) revealed evidence of the following recognized environmental conditions (RECs):

1. Soil borings for the closed Madison Brass Works leaking underground storage tank (LUST) site investigation encountered industrial fill material such as foundry sand and coal ash. Some of the borings may have been installed on the adjoining former railroad corridor due to the lack of land between the building and the Property line. Historically, foundry sand and coal ash from the Madison Brass Works may have been disposed on the Property and/or in the railroad corridor. The presence of foundry sand and coal ash on the adjoining City of Madison bike path property, and possibly on the Property, is identified as a REC for the Property.
2. Three groundwater monitoring wells were installed on the Property during the Madison Brass Works LUST site investigation. Groundwater was encountered at approximately 13 to 14 feet below ground surface (bgs). PCE was detected in one monitoring well at a concentration above the NR 140 ES. Chlorinated solvents were reportedly never used on the Property, and were not detected in the other two monitoring wells. The WDNR identified the Madison Kipp Corporation on the adjoining property to the east as the source of the contaminant. Based on excerpts from investigation reports of the Kipp property provided by the City of Madison, the western edge shallow/water table contaminant plume from Kipp was located on the east side of Waubesa Street in 2010.

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At the same time, the western edge of the Kipp's deep groundwater contaminant plume was located on the west side of Waubesa Street and included most of the Property. Sub-slab and indoor air sampling for VOCs has been performed in residential properties around the Madison Kipp Corporation facility. Passive vapor mitigation systems have been installed in some of the houses. One of the houses is located at 249 Waubesa Street, across the street and south of the Property. The presence of PCE-contaminated groundwater with the associated subsurface vapors on the Property is identified as a REC for the Property.

3. A 1,000-gallon fuel oil UST was closed/removed from inside the Madison Brass Works furnace room in 1992. No contamination was noted in the Checklist for Underground Tank Closure form. A fuel oil odor is present inside the furnace room. The fuel oil was historically transported to small metal-melting furnaces through aboveground pipes. The piping is still present. Most of the floor is concrete except for the area surrounding the furnaces. That area is filled with rocks, and the underlying surface is not visible. The fuel oil odor that is present inside the furnace room is identified as a REC for the Property due to the potential for fuel oil releases around the furnaces.
4. A rail spur that was historically located along the northwest side of the Property extended to the Madison Kipp Corporation property. Historically, rail cars were often parked on rail spurs, and rail cars often leaked. The historical presence of a rail spur along the northwest side of the Property is identified as a REC for the Property due to the potential for releases from parked rail cars.
5. The Goodman Community Center site north of the Property was closed with a Geographic Information System Registry for residual soil and groundwater contamination. The Property is identified as a controlled REC (CREC) due to the residual contamination. The CREC on the Goodman property is identified as a REC for the Property. The residual soil contamination at the Goodman site was covered with a cap, and the site is separated from the Property by the City of Madison bike path. The residual groundwater contamination at the Goodman site is the PCE-contaminated groundwater plume that is attributed to the Madison Kipp Corporation. During the remediation of the Goodman site, industrial fill material with PAH metals was on the City of Madison bike path right-of-way (ROW). A portion of the bike path ROW was remediated in conjunction with the Goodman Community Center site. The presence of industrial fill material within the former railroad corridor is identified as a REC for the Property due to the potential for the same material to be present along the Property boundary.

Consistent with the SCS Phase 2 ESA Sampling and Analysis Plan (SAP) dated November 20, 2014, the scope of the Phase 2 ESA was intended to identify and characterize potential soil and groundwater contamination at the site. This report provides our conclusions related to our findings and includes a summary of analytical results, field observations, and report qualifications and limitations.

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## SOILS, GEOLOGY, AND HYDROGEOLOGY

The EDR Report Geocheck® Addendum from the Phase 1 ESA (SCS, 2014b) includes a Soil Survey Geographic map for the Property area, with soil descriptions. Soil in the vicinity of the Property is mapped as Virgil silt loam. The soil is described as deep and moderately deep, moderately well and well drained soils with moderately coarse textures and moderate infiltration rates. Bedrock in the vicinity of the Property is described as being from the Paleozoic Era, the Ordovician System, and the Lower Ordovician (Canadian) Series.

A review of the 1983 U.S. Geological Survey Madison East Quadrangle topographic map reveals the Property is located approximately 870 feet above mean sea level. The Property is located 2,300 feet north of Lake Monona, approximately 7,000 feet east of Lake Mendota, and approximately 4,700 feet northeast of the Yahara River that connects the two lakes (**Figure 1**).

The ground surface in the immediate vicinity of the Property is relatively level. Based on a shallow groundwater map included in a RMT's 1993 Phase II Hydrogeologic Investigation Report, local groundwater flow at the site is to the west-southwest.

## PHASE 2 ESA

### Soil Investigation

SCS supervised the installation of four soil borings (GP-1 to GP-4) at the Property on December 2, 2014, and collected soil samples in conformance with the most recently approved USEPA Quality Assurance Project Plan (QAPP) dated November 2013 (SCS, 2013). **Figure 2** shows the locations of borings installed for this Phase 2 ESA, along with the approximate layout of the Property and significant site features.

The four soil borings extended from a range of 12 to 16 feet bgs. The borings were abandoned in accordance with ch. NR 141, Wisconsin Administrative Code requirements.

During the soil boring activities, SCS logged each borehole, performed headspace screening, and collected soil samples for laboratory analysis. Borings were logged for soil stratigraphy and examined for evidence of contamination. Information for each completed soil boring was recorded directly on a standard soil boring log form. Soil classification, sample recovery length, headspace screening results, and moisture content were recorded on the boring logs. The soil boring logs and borehole abandonment forms are included in **Attachment A**.

Soil samples were collected continuously at each boring and screened with a photo-ionization detector (PID) for the presence of VOCs in the field. PID screening results in borings GP-1, GP-2, and GP-3 were between 0.1 and 1.2 parts per million (ppm). PID screening results at boring GP-4, located in the former furnace room, ranged from 1.3 ppm to 27.2 ppm. Observed soils generally consisted of silty sand, silt, and silty clay. Non-soil fill materials such as cinders were observed in the fill soils encountered in some of the soil borings. The apparent fill soils appeared to extend as deep as 4 feet in boring GP-4. Saturated soil was encountered at 13 feet bgs at GP-

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2; however, there was insufficient water in the borehole for sampling and it was difficult to advance the boring beyond a depth of 15 feet.

One or two soil samples were collected from each soil boring and submitted to the project laboratory for analysis. Soil samples were analyzed for VOCs, PAHs, and the following Resource Conservation and Recovery Act (RCRA) metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Four soil samples were also analyzed for lead using the TCLP. Two soil samples were analyzed for polychlorinated biphenyls (PCBs).

### **Groundwater Investigation**

SCS collected groundwater samples from two existing monitoring wells at the site (MW-2 and MW-3) at the Property on December 3, 2014, and collected soil samples in conformance with the most recently approved U.S. Environmental Protection Agency (USEPA) Quality Assurance Project Plan (QAPP) dated November 2013 (SCS, 2013). The well locations are shown on **Figure 2**. MW-1 was not sampled as it was apparently paved over by the bike path that borders the northwest side of the Property.

### **Sub-Slab Vapor Investigation**

SCS installed three sub-slab soil vapor sample collection points (B-3, B-4, and B-5) at the Property on December 2, 2014, and collected soil vapor samples in conformance with the most recently approved USEPA QAPP dated November 2013 (SCS, 2013). The soil vapor sample locations are shown on **Figure 2**. Soil vapor samples were collected using 6-liter Summa canisters and were analyzed for VOCs.

## **ANALYTICAL RESULTS**

Results of soil and groundwater analyses are described below. Results of duplicate samples are included in tables with the primary sample results. Results of quality control (blank) samples are tabulated separately and are included in **Tables 8 through 11**.

### **Soil Analytical Results**

Laboratory analyses confirmed the presence of PAH impacts to soil indicated by field observation of cinders in the fill material. Metals and VOC impacts to soil at the site were also detected. No PCBs were detected. Soil analytical data are summarized in **Tables 1 through 4**. The analytical laboratory report is included in **Attachment B**.

### **VOCs**

VOCs were detected in samples from GP-2, GP-3, and GP-4 (**Table 1**). No detected concentration exceeded an NR 720 direct contact RCL. The naphthalene concentration detected at 4-8 feet bgs in GP-4 exceeded the NR 720 groundwater pathway RCL.

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### PAHs

Several PAHs were detected at concentrations greater than the associated NR 720 non-industrial direct contact RCLs in samples collected from depths less than 4 feet bgs at GP-2 and GP-3 (**Table 3**). Benzo(a)pyrene exceeded the industrial direct contact RCL in the same samples. Several PAH concentrations exceeded direct-contact standards in the shallower sample collected at GP-4; however this sample was collected at a depth greater than 4 feet bgs.

Benzo(a)pyrene was detected at a concentration greater than the non-industrial direct contact RCL at GP-1. This is an estimated concentration because the detected concentration is below the laboratory reporting limit. Benzo(a)pyrene was not detected in the field duplicate sample collected at GP-1.

Multiple PAHs were detected at concentrations greater than the associated NR 720 groundwater pathway RCLs in samples from GP-2, GP-3, and the shallower sample from GP-4 (**Table 2**). PAH impacts at GP-4 appear to be limited to the upper 8 feet of soil; no PAH standard exceedances were detected in the sample collected from GP-4 at 8 to 10 feet bgs.

### Metals

Arsenic, cadmium, and/or lead were detected at concentrations greater than established background threshold values (BTVs) in all of the samples collected at depths shallower than 8 feet. As indicated by the absence of metals concentrations greater than NE 140 ESs in groundwater, groundwater pathway RCL values are not applicable at this site.

Arsenic was detected at concentrations above the non-industrial direct contact RCL in the sample collected at 4-8 feet bgs in GP-4, and at concentrations above the industrial direct contact RCL in all other samples. Lead was detected at concentrations above the non-industrial direct contact RCL at 1-2 feet bgs in GP-3 and above the industrial direct-contact RCL at 1-2 feet bgs in GP-2.

All samples in which lead concentrations exceeded the BTV were also analyzed for TCLP lead. The detected concentration in the sample collected at 1-2 feet bgs in GP-2 (9.2 mg/L) exceeds the USEPA toxicity characteristic regulatory level (5.0 mg/L). This soil would therefore be considered hazardous waste if excavated from the site.

### Groundwater Analytical Results

Laboratory analyses confirmed the presence of VOC and metals impacts to groundwater at the site. Groundwater analytical data are summarized in **Tables 5** and **6**. The analytical laboratory report is included in **Attachment B**.

### VOCs

No VOCs were detected at concentrations greater than NR 140 ESs. PCE was detected at a concentration greater than the NR 140 PAL in the sample collected from MW-3 (**Table 5**). No other VOCs were detected in the groundwater samples collected from monitoring wells MW-2

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and MW-3. PCE has historically been detected at MW-3 and has been attributed to an upgradient, off-site source on the Madison Kipp property.

### Metals

No dissolved metals were detected at concentrations greater than ESs. As shown in **Table 6**, the lead concentration detected in the MW-2 groundwater sample (3.9 µg/L) is greater than the PAL (1.5 µg/L). However this result was reported as an approximate value because it is lower than the laboratory reporting limit. Lead was not detected in the field duplicate collected at MW-2. Cadmium was detected at concentrations above the PAL in both the sample and duplicate collected at MW-2. These concentrations were also reported as approximate values because they did not exceed the laboratory reporting limit, and cadmium was detected at a concentration above the PAL in the groundwater sampling equipment blank.

### Sub-Slab Vapor Analytical Results

Several VOCs were detected in all sub-slab vapor samples collected at the site. No detected concentration exceeded the applicable residential sub-slab vapor risk screening level (RSL). The soil vapor laboratory analytical report is included in **Attachment B**, and the results are summarized in **Table 7**.

### REFERENCES

- EDR, The EDR Radius Map™ Report with GeoCheck®, September 18, 2014.
- RMT, 1993, Phase II Hydrogeologic Investigation Report, Madison Brass Works, Inc., 214 Waubesa Street, Madison, Wisconsin, September 1993: Madison, WI.
- SCS Engineers, 2013, Quality Assurance Project Plan, Revision 1, City of Madison, Wisconsin City-Wide Brownfield Assessment Project for Hazardous Substances and Petroleum Products, November 2013: Madison, WI.
- SCS Engineers, 2014(a), Phase 1 Environmental Assessment, Thomas F. Pankratz Property, Former Madison Brass Works, 206-214 Waubesa Street, November 2014: Madison, WI.
- SCS Engineers, 2014(b), Phase 2 Environmental Assessment Sampling and Analysis Plan, Thomas F. Pankratz Property/Former Madison Brass Works, 206-214 Waubesa Street, Madison, Wisconsin 53704, November 2014: Madison, WI.
- United States Geological Survey, 1983, Madison East Quadrangle, Wisconsin, 7.5-Minute Topographic Quadrangle.

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## CONCLUSIONS

- The TCLP-lead result at GP-2 exceeds the USEPA toxicity characteristic regulatory level; soil in this portion of the Property would be classified as a hazardous waste, if it is excavated. The soil may be treated in place to render it non-hazardous prior to off-site disposal, if necessary.
- The analytical results show that PAH contamination exceeding WDNR standards is present in soil. The PAH contamination in soil appears to be associated with combustion residues (cinders) mixed with non-native soil fill.
- The low PID screening values and detectable VOC concentrations in the soil indicate that impacts from former USTs on the Property, if present, are of very limited extent.
- A naphthalene concentration exceeding a NR 720 RCL in the soil boring advanced in the former boiler room indicates that limited VOC impacts are present in this portion of the site. It is not clear whether the naphthalene detected at this location is associated with fill materials or petroleum from an on-site source.
- Fill material and soil contaminated with elevated concentrations of PAHs, VOCs, and/or metals removed from the site will need to be disposed in a solid waste landfill. WDNR normally requires that fill contaminated with detectable concentrations of PAHs be handled as solid waste if removed from the “source” site regardless of whether the concentrations exceed NR 720 cleanup standards.
- Groundwater analytical results for VOCs indicate that PCE is present at MW-3, which has historically had PCE detections associated with an upgradient, off-site source.
- Groundwater analytical results for metals indicate that lead and cadmium exceed the NR 140 PAL at MW-2. However, both concentrations were reported as approximate values and lead was not detected in the field duplicate collected at MW-2. Additional sampling may be needed to confirm the detected PAL exceedances. The absence of metals concentrations greater than ESs in groundwater indicates that direct contact and/or BTVs are the appropriate standards for comparison of detected metals concentrations in soil.
- Sub-slab vapor analytical results for VOCs did not exceed residential sub-slab vapor risk screening levels.

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Please do not hesitate to contact us at (608) 224-2830 if you have any questions regarding this report.

Sincerely,

**DRAFT**

Eric Oelkers, PG  
Senior Project Manager  
**SCS ENGINEERS**

**DRAFT**

Meghan Blodgett  
Hydrogeologist  
**SCS ENGINEERS**

MDB/jsn/EO/JBT

Enclosures: Table 1 – Soil Analytical Results Summary – VOCs  
Table 2 – Soil Analytical Results Summary – PAHs  
Table 3 – Soil Analytical Results Summary – Metals  
Table 4 – Soil Analytical Results Summary – PCBs  
Table 5 – Groundwater Analytical Results Summary - VOCs  
Table 6 – Groundwater Analytical Results Summary - Metals  
Table 7 – Sub-Slab Vapor Analytical Results Summary  
Table 8 – Equipment Blank Analytical Results Summary - VOCs  
Table 9 – Equipment Blank Analytical Results Summary - Metals  
Table 10 – Equipment Blank Analytical Results Summary – PAHs  
Table 11 – Equipment Blank Analytical Results Summary - PCBs  
Figure 1 – Site Location Map  
Figure 2 – Site Plan  
Attachment A – Soil Boring Logs and Abandonment Forms  
Attachment B – Analytical Laboratory Reports

cc: Patricia Polston, USEPA  
Wendy Weihemuller, WDNR  
Tom Pankratz, Owner

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## TABLES

- Table 1 – Soil Analytical Results Summary – VOCs
- Table 2 – Soil Analytical Results Summary – PAHs
- Table 3 – Soil Analytical Results Summary – Metals
- Table 4 – Soil Analytical Results Summary – PCBs
- Table 5 – Groundwater Analytical Results Summary - VOCs
- Table 6 – Groundwater Analytical Results Summary - Metals
- Table 7 – Sub-Slab Vapor Analytical Results Summary
- Table 8 – Equipment Blank Analytical Results Summary - VOCs
- Table 9 – Equipment Blank Analytical Results Summary - Metals
- Table 10 – Equipment Blank Analytical Results Summary – PAHs
- Table 11 – Equipment Blank Analytical Results Summary - PCBs

**Table 1. Soil Analytical Results Summary - VOCs**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{kg}$ , except where noted otherwise)

Sample	Date	Depth (feet)	PID (ppm)	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	1,2,4- & 1,3,5-TMB Combined	MTBE	Other VOCs
PP-SB-GP-1	12/2/2014	3-4	0.3	(1)	<5.5	<9.3	<8.5	<5.0	<16	<15	ND	<32	ND
PP-SB-GP-1-FD	12/2/2014	3-4	0.3	(1)	<5.6	<9.5	<8.7	<5.2	<16	<16	ND	<32	ND
PP-SB-GP-2	12/2/2014	1-2	0.4	(1)	<5.1	<8.6	<7.8	59	<14	<14	ND	<29	ND
PP-SB-GP-3	12/2/2014	1-2	1.2	(1)	<5.1	<8.7	25	83	<15	<14	ND	<30	ND
PP-SB-GP-4	12/2/2014	4-8	27.2	(1)	<5.0	<8.5	<7.7	63	190	60 J	250	<29	Isopropylbenzene (cumene) 37 J Naphthalene 740 n-Butylbenzene 130 N-Propylbenzene 62 J P-Isopropyltoluene 100 J sec-Butylbenzene 170
PP-SB-GP-4	12/2/2014	8-10	3.6	(1)	<4.9	<8.3	<7.6	<4.5	33 J	<14	33	<28	Naphthalene 130 N-Propylbenzene 13 J
PP-SB-TB	12/2/2014	--	--	(1)	<3.7	<6.3	<5.8	<3.4	<11	<10	ND	<22	ND
NR 720 Groundwater Pathway RCLs with a Wisconsin-Default Dilution Factor of 2					5.1	1,570	1,107.20	3,940	(a)		1,382.10	27	Naphthalene 658.2
NR 720 Non-Industrial Direct Contact RCLs					1,490	7,470	818,000	258,000	89,800	182,000	182,000	59,400	Isopropylbenzene (cumene) 268,000 Naphthalene 5,150 n-Butylbenzene 108,000 N-Propylbenzene 264,000 P-Isopropyltoluene 162,000 sec-Butylbenzene 145,000
NR 720 Industrial Direct Contact RCLs					7,410	37,000	818,000	258,000	219,000	182,000	182,000	293,000	Isopropylbenzene (cumene) 268,000 Naphthalene 26,000 n-Butylbenzene 108,000 N-Propylbenzene 264,000 P-Isopropyltoluene 162,000 sec-Butylbenzene 145,000

## Abbreviations:

 $\mu\text{g}/\text{kg}$  = micrograms per kilogram or parts per billion (ppb)

RCL = Residual Contaminant Level

-- = Not Applicable

ND = Not Detected

Dup = Duplicate

mg/kg - milligrams per kilogram or parts per million (ppm)

TMB = Trimethylbenzene

MTBE = Methyl-tert-butyl ether

VOCs = Volatile Organic Compounds

NE = Not Established

**Table 1. Soil Analytical Results Summary - VOCs**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{kg}$ , except where noted otherwise)

Notes:

**Bold+underlined** values exceed a NR 720 RCL, as of June 2014.

(a) NR 720 Groundwater Pathway RCLs for 1,2,4 and 1,3,5 Trimethylbenzene Combined = 1,382.1

Laboratory Notes/Qualifiers:

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

(1) Chloromethane, dichlorodifluoromethane, and vinyl chloride = Laboratory control sample (LCS) and LCS duplicate exceeds the control limits.

Created by:	<u>TLC</u>	Date:	<u>12/15/2014</u>
Last revision by:	<u>TLC</u>	Date:	<u>12/15/2014</u>
Checked by:	<u>MDB</u>	Date:	<u>12/18/2014</u>

I:\25212326\Tables-General\Pankratz Property\[1\_Soil\_VOCs.xls]Soil VOCs

**Table 2. Soil Analytical Results Summary - Metals**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in mg/kg unless otherwise noted)

Sample	Date	Depth (feet)	Lab Notes	Arsenic	Barium	Cadmium	Chromium (Total)	Lead	Lead - TCLP (mg/L)	Mercury	Selenium	Silver
PP-SB-GP-1	12/2/2014	3-4	--	<b>7.9</b>	140	<b>0.91</b>	17	<b>70</b>	NA	0.12	<0.43	<0.043
PP-SB-GP-1-FD	12/2/2014	3-4	--	<b>7.4</b>	140	<b>1.2</b>	16	<b>110</b>	0.039 J	0.13	<0.42	<0.043
PP-SB-GP-2	12/2/2014	1-2	--	<b>9.5</b>	50	<b>7.3</b>	11	<b>1,900</b>	<b>9.2</b>	0.083	<b>1.2</b>	<b>0.98</b>
PP-SB-GP-3	12/2/2014	1-2	--	<b>14</b>	63	<b>1.3</b>	15	<b>550</b>	0.40	0.061	<b>1.1</b>	0.56
PP-SB-GP-4	12/2/2014	4-8	--	<b>1.6</b>	61	<b>0.99</b>	5.8	<b>130</b>	0.17	0.078	<0.40	<0.041
PP-SB-GP-4	12/2/2014	8-10	--	<b>4.4</b>	75 V	0.17 J	14 V	15	NA	0.019	0.38 J	<0.038
NR 720 Groundwater Pathway RCLs with a Wisconsin-Default Dilution Factor of 2				0.584	164.8	0.752	360,000	27	NE	0.208	0.52	0.85
NR 720 Non-Industrial Not-To-Exceed Direct Contact RCLs				0.613	15,300	70	NE <sup>1</sup>	400	NE	3.13	391	391
NR 720 Industrial Not-To-Exceed Direct Contact RCLs				2.39	100,000	799	NE <sup>1</sup>	800	NE	3.13	5,110	5,110
EPA Toxicity Characteristic Regulatory Level				--	--	--	--	--	5.0	--	--	--
Background Threshold Level				8	364	1	44	52	NE	NE	NE	NE

**Abbreviations:**

mg/kg - milligrams per kilogram or parts per million (ppm)

NE = No Standard Established

DUP = duplicate

-- = Not Applicable

RCLs = Residual contaminant levels

TCLP = Toxicity Characteristic Leaching Procedure

**Notes:****Bold+underlined** values exceed NR 720 RCLs, as of December 2014, or the EPA Toxicity Characteristic Regulatory Level, per EPA Title 40 CFR 261.24.<sup>1</sup> Chromium Direct Contact Standards III Non-Industrial Direct Contact RCL = 100,000 mg/kg; Industrial Direct Contact RCL = 100,000 mg/kg

VI Non-Industrial Direct Contact RCL = 0.293 mg/kg; Industrial Direct Contact RCL = 5.58 mg/kg

**Laboratory Notes/Qualifiers:**

B = Compound was found in the blank and sample.

J = Results is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

V = Serial dilution exceeds the control limits.

Created by: TLC Date: 12/15/2014  
Last revision by: MDB Date: 1/11/2015  
Checked by: TLC Date: 1/12/2015

**Table 3. Soil Analytical Results Summary - PAHs**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{kg}$ , except where noted otherwise)

Sample	Date	Depth (feet)	Lab Notes	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(ghi)perylene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Phenanthrene	Pyrene
PP-SB-GP-1	12/2/2014	3-4	--	<7.1	<5.2	<6.6	34 J	34 J	23 J	22 J	18 J	36 J	8.8 J	55	<5.5	19 J	<9.6	<7.2	<6.0	26 J	51
PP-SB-GP-1-FD	12/2/2014	3-4	--	<7.5	<5.5	<7.0	<5.6	<9.0	<12	<8.1	<13	<11	<8.0	9.4 J	<5.8	<11	<10	<7.7	<6.4	<5.8	11 J
PP-SB-GP-2	12/2/2014	1-2	--	50	<5.1	86	360	380	160	240	200	380	60	800	34 J	150	340	370	150	750	570
PP-SB-GP-3	12/2/2014	1-2	--	<32	41 J	53 J	410	580	200	270	220	460	84 J	760	<25	200	160 J	230	94 J	630	670
PP-SB-GP-4	12/2/2014	4-8	--	<68	<50	250 J	770	900	340 J	420	440	870	<73	1,700	560	370	3,200	4,900	1,100	5,000	4,300
PP-SB-GP-4	12/2/2014	8-10	--	<6.7	<4.9	<6.3	<5.0	<8.1	<11	<7.3	<12	<10	<7.2	<6.9	<5.3	<9.7	19 J	25 J	15 J	18 J	7.7 J
NR 720 Groundwater Pathway RCLs with a Wisconsin-Default Dilution Factor of 2				NE	NE	197,727.3	NE	479.3	NE	470	NE	144.6	NE	88,877.8	14,802.7	NE	NE	NE	658.2	NE	54,132.2
NR 720 Non-Industrial Not-To-Exceed Direct Contact RCLs				3,440,000	NE	17,200,000	148	148	1,480	15	NE	14,800	15	2,290,000	2,290,000	148	15,600	229,000	5,150	NE	1,720,000
NR 720 Industrial Direct Contact RCLs				33,000,000	NE	100,000,000	2,110	2,110	21,100	211	NE	211,000	211	22,000,000	22,000,000	2,110	53,100	2,200,000	26,000	NE	16,500,000

## Abbreviations:

 $\mu\text{g}/\text{kg}$  = micrograms per kilogram or parts per billion (ppb)

-- = Not Applicable

NE = Not Established

Dup = Duplicate

PAHs = Polynuclear Aromatic Hydrocarbons

RCL = Residual Contaminant Level

WDNR = Wisconsin Department of Natural Resources

## Notes:

**Bold+underlined** values meet or exceed an NR 720 RCL, as of June 2014.

## Laboratory Notes/Qualifiers:

J = Results is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

Created by: TLC Date: 12/15/2014

Last revision by: TLC Date: 12/15/2014

Checked by: MDB Date: 12/18/2014

**Table 4. Soil Analytical Results Summary - PCBs**  
**Pankratz Property / SCS Engineers Project #25212326**  
 (Results are in mg/kg, except where noted otherwise)

Sample	Date	Depth (feet)	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
PP-SB-GP-1	12/2/2014	3-4	<0.0072	<0.0089	<0.0089	<0.0067	<0.0080	<0.0044	<0.010
PP-SB-GP-1-FD	12/2/2014	3-4	<0.0074	<0.0091	<0.0091	<0.0068	<0.0082	<0.0045	<0.010
PP-SB-GP-2	12/2/2014	1-2	<0.0069	<0.0086	<0.0085	<0.0064	<0.0077	<0.0042	<0.0096
PP-SB-GP-4	12/2/2014	8-10	<0.0066	<0.0082	<0.0081	<0.0061	<0.0073	<0.0040	<0.0091
NR 720 Direct-Contact RCLs			3.93	0.159	0.159	0.221	0.221	0.221	0.221

Abbreviations:

PCBs = Polychlorinated Biphenyls

mg/kg = milligrams per kilogram

RCL = Residual Contaminant Level

Dup = Duplicate

Created by: TLC Date: 12/15/2014  
 Last revision by: TLC Date: 12/15/2014  
 Checked by: MDB Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[4\_Soil\_PCBs.xls]Soil PCBs

**Table 5. Groundwater Analytical Results Summary - VOCs**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{L}$ )

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Other VOCs
PP-GW-MW-2	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	ND
PP-GW-MW-2-FD	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	ND
PP-GW-MW-3	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	Tetrachloroethene <u>0.55</u>
PP-GW-TB	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	ND
NR 140 Enforcement Standards (ESs)		5	700	800	2,000	480	60	Tetrachloroethene	5
NR 140 Preventive Action Limits (PALs)		0.5	140	160	400	96	12	Tetrachloroethene	0.5

Abbreviations:

$\mu\text{g}/\text{L}$  = micrograms per liter or parts per billion (ppb)

TMBs = 1,2,4- and 1,3,5-trimethylbenzenes

(Dup) = Duplicate Sample

ND = Not Detected

MTBE = Methyl-tert-butyl ether

VOCs = Volatile Organic Compounds

-- = Not Applicable

Notes:

NR 140 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.

Laboratory Notes/Qualifiers:

Created by: TLC Date: 12/16/2014  
Last revision by: TLC Date: 12/16/2014  
Checked by: MDB Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[5\_GW\_VOCs.xls]GW VOCs

**Table 6. Groundwater Analytical Results Summary - Metals**  
**Pankratz / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{L}$ )

Sample	Date	Lab Notes	Arsenic	Barium	Cadmium	Chromium (Total)	Lead	Mercury	Selenium	Silver
PP-GW-MW-2	12/3/2014	--	<2.6	<b>130</b> B	<u>1.0</u> J	<u>1.3</u> J	<u>3.9</u> J	<0.072	<4.6	<0.57
PP-GW-MW-2-FD	12/3/2014	--	<2.6	<b>120</b> B	<u>0.81</u> J	<1.0	<2.3	<0.072	<4.6	<0.57
PP-GW-MW-3	12/3/2014	--	<2.6	<b>6.4</b> J,B	<0.26	<1.0	<2.3	<0.072	<4.6	<.057
PP-GW-EB	12/3/2014	--	<2.6	<b>170</b> B	<u>1.1</u> J	<1.0	<2.3	<0.072	<4.6	<0.57
NR 140.10 Enforcement Standards (ESs)			10	2,000	5	100	15	2	50	50
NR 140.10 Preventive Action Limits (PALs)			1	400	0.5	10	1.5	0.2	10	10
NR 140.12 Enforcement Standards (ESs)			NE	NE	NE	NE	NE	NE	NE	NE
NR 140.12 Preventive Action Limits (PALs)			NE	NE	NE	NE	NE	NE	NE	NE

Abbreviations:

$\mu\text{g}/\text{L}$  = micrograms per liter or parts per billion (ppb)

NE = No Standard Established

-- = Not Applicable

Notes:

NR 140.10 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140.10 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140.12 ESs - WAC, Chapter NR 140.12 Table 2 - Public Welfare Groundwater Quality Standards.

NR 140.12 PALs - WAC, Chapter NR 140.12 Table 2 - Public Welfare Groundwater Quality Standards.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.

*Italic+underlined* values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:

B = Compound was found in the blank and sample.

J = Results is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value.

Created by: TLC Date: 12/16/2014  
Last revision by: TLC Date: 12/16/2014  
Checked by: MDB Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[6\_GW\_Metals.xls]GW Metals

**Table 7. Sub-Slab Vapor Analytical Results Summary**  
**Madison Brownfields - 829 East Washington Avenue/ SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{m}^3$ )

Sample	Date	PID (ppb)	Benzene	Carbon Tetrachloride	Chloromethane	Dichloro-difluoromethane	Ethylbenzene	Methylene Chloride	Styrene	1,4-Dichlorobenzene	1,2-Dichloroethane	Toluene	PCE	1,1,1-Trichloroethane	TCE	Trichlorofluoro-methane	1,1,2-Trichloro-1,2,2-trifluoroethane	m-Xylene & p-Xylene	o-Xylene	1,3,5-TMB	1,2,4-TMB
PP-VP-B-4	12/2/2014	2,600	2.2	0.37 J	<0.33	2.1	6.4	1.1 JB	0.31 J	0.59 J	0.29 J	19	2.4	<0.16	0.96 J	1.1	0.50 J	10	3.6	0.67 J	2.8
PP-VP-B-4-FD	12/2/2014	2,600	1.9	0.38 J	0.7 J	2.1	5.4	0.74 JB	0.30 J	0.45 J	0.26 J	16	2.2	<0.16	0.68 J	1.1	0.53 J	8.6	2.9	0.60 J	2.4
PP-VP-B-5	12/2/2014	14.38	3.2	<0.24	<0.33	2.5	14.0	0.88 JB	0.48 J	1.0 J	0.70 J	36	5.5	67	0.51 J	1.3	0.49 J	19	6.2	1.0	3.8
PP-VP-B-6	12/2/2014	2,614	3.1	0.24 J	<0.33	2.1	8.9	1.1 JB	0.57 J	0.95 J	0.69 J	28	2.4	5.9	1.4	2.2	0.46 J	16	4.8	0.77 J	3.2
PP-BP-EB	12/2/2014	1,794	1.5	0.56 J	1.0	2.1	6.8	1.3 JB	0.46 J	0.65 J	0.62 J	21	<0.27	<0.16	0.95 J	1.2	0.54 J	13	3.7	0.72 J	2.7
Residential Indoor Air Vapor Action level ( $\mu\text{g}/\text{m}^3$ )		3.6	4.7	94	100	11	630	1,000	2.6	1.1	5,200	42	5,200	2.1	730	31,000	100	100	NE	7.3	
Residential Sub-Slab Vapor Risk Screening Level (0.1 AF)		36	47	940	1,000	110	6,300	10,000	26	11	52,000	420	52,000	21	7,300	310,000	1,000	1,000	NE	73	
Non-Residential Indoor Air Vapor Action level ( $\mu\text{g}/\text{m}^3$ )		16	20	390	440	49	2,600	4,400	11	4.7	22,000	180	22,000	8.8	3,100	130,000	440	440	NE	31	
Non-Residential Sub-Slab Vapor Risk Screening Level		160	200	3,900	4,400	490	26,000	44,000	110	47	220,000	1,800	220,000	88	31,000	1,300,000	4,400	4,400	NE	310	

**Abbreviations:** $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

NE = No Established Target Shallow Soil Gas Concentration

AF = attenuation factor

PCE = tetrachloroethene

TCE = trichloroethene

ppb = parts per billion

TMB = trimethylbenzene

-- = not applicable

PID - photo-ionization detector

**Notes:**

1. Samples were collected in 6L summa canisters over 30 minute period and analyzed using the US EPA TO-15 analytical method.

2. Target Indoor Air Concentrations taken from United States Environmental Protection Agency (EPA) Region 3, 6, and 9 Regional Screening Levels for Superfund Sites Tables, Residential scenario.

3. **Bold+underlined** values meet or exceed the Target Sub-Slab Vapor Concentrations (based on the Target Indoor Air Concentrations and an attenuation factor of 0.1).**Laboratory Notes/Qualifiers:**

B = Compound was found in the blank and sample.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Created by: MDBDate: 12/19/2014Last Rev by: MDBDate: 12/19/2014Checked by: PRHDate: 12/22/2014

**Table 8. Equipment Blank Analytical Results Summary - VOCs**  
**Pankratz Property / SCS Engineers Project #25212326**  
(Results are in  $\mu\text{g}/\text{L}$ )

Sample	Date	Lab Notes	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Other VOCs
PP-GW-EB	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	ND
PP-SB-EB	12/3/2014	--	<0.074	<0.13	<0.11	<0.068	<0.32	<0.24	ND
NR 140 Enforcement Standards (ESs)			5	700	800	2,000	480	60	Tetrachloroethene 5
NR 140 Preventive Action Limits (PALs)			0.5	140	160	400	96	12	Tetrachloroethene 0.5

Abbreviations:

$\mu\text{g}/\text{L}$  = micrograms per liter or parts per billion (ppb)

TMBs = 1,2,4- and 1,3,5-trimethylbenzenes

(Dup) = Duplicate Sample

ND = Not Detected

MTBE = Methyl-tert-butyl ether

VOCs = Volatile Organic Compounds

-- = Not Applicable

Notes:

NR 140 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.

*Italic+underlined* values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:

Created by:	TLG	Date: 12/16/2014
Last revision by:	MDB	Date: 12/18/2014
Checked by:	PRH	Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[8\_EB\_VOCs.xls]GW VOCs

**Table 9. Equipment Blank Analytical Results Summary - Metals**  
**Pankratz / SCS Engineers Project #25212326**  
 (Results are in µg/L)

Sample	Date	Lab Notes	Arsenic	Barium	Cadmium	Chromium (Total)	Lead	Mercury	Selenium	Silver
PP-SB-EB	12/3/2014	--	<2.6	<b>6.2</b> J,B	<0.26	<1.0	<2.3	<0.072	<4.6	<.057
PP-GW-EB	12/3/2014	--	<2.6	<b>170</b> B	<u>1.1</u> J	<1.0	<2.3	<0.072	<4.6	<0.57
NR 140.10 Enforcement Standards (ESs)			10	2,000	5	100	15	2	50	50
NR 140.10 Preventive Action Limits (PALs)			1	400	0.5	10	1.5	0.2	10	10
NR 140.12 Enforcement Standards (ESs)			NE	NE	NE	NE	NE	NE	NE	NE
NR 140.12 Preventive Action Limits (PALs)			NE	NE	NE	NE	NE	NE	NE	NE

Abbreviations:

µg/L = micrograms per liter or parts per billion (ppb)

NE = No Standard Established

-- = Not Applicable

Notes:

NR 140.10 ESs - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140.10 PALs - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140.12 ESs - WAC, Chapter NR 140.12 Table 2 - Public Welfare Groundwater Quality Standards.

NR 140.12 PALs - WAC, Chapter NR 140.12 Table 2 - Public Welfare Groundwater Quality Standards.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.

*Italic+underlined* values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:

B = Compound was found in the blank and sample.

J = Results is less than the reporting limit but greater than the method detection limit and the concentration is an approximate value.

Created by:	TLC	Date:	12/16/2014
Last revision by:	MDB	Date:	12/18/2014
Checked by:	PRH	Date:	12/18/2014

I:\25212326\Tables-General\Pankratz Property\[9\_EB\_Metals.xls]GW Metals

**Table 10. Equipment Blank Analytical Results Summary - PAHs**  
**Pankratz Property / SCS Engineers Project #25212326**  
 (Results are in µg/L)

Sample	Date	Lab Notes	Acenaph-thene	Acenaph-thylene	Anthracene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Benzo(ghi)perylene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	1-Methyl-naphthalene	2-Methyl-naphthalene	Naphthalene	Phenanthrene	Pyrene
PP-SB-EB	12/3/2014	--	<0.24	<0.20	<0.25	<0.043	<0.061	<0.049	<0.075	<0.29	<0.052	<0.039	<0.35	<0.19	<0.057	<0.23	<0.050	<0.24	<0.23	<0.32
NR 140 Enforcement Standards (ESs)		NE	NE	3,000	NE	0.2	NE	0.2	NE	0.2	NE	400	400	NE	NE	NE	100	NE	250	
NR 140 Preventive Action Limits (PALs)		NE	NE	600	NE	0.02	NE	0.02	NE	0.02	NE	80	80	NE	NE	NE	10	NE	50	

## Abbreviations:

µg/L = micrograms per liter or parts per billion (ppb)

PAHs = Polynuclear Aromatic Hydrocarbons

NE = No Standard Established

(Dup) = Duplicate

-- = Not Applicable

## Notes:

NR 140 ES - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

NR 140 PAL - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards.

**Bold+underlined** values meet or exceed NR 140 enforcement standards.*Italic+underlined* values meet or exceed NR 140 preventive action limits.

## Laboratory Notes/Qualifiers:

Created by: MDB Date: 12/18/2014  
 Last revision by: MDB Date: 12/18/2014  
 Checked by: PRH Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[10\_EB\_PAHs.xlsx]GW PAHs

**Table 11. Equipment Blank Analytical Results Summary - PCBs****Pankratz Property / SCS Engineers Project #25212326**(Results are in  $\mu\text{g}/\text{L}$ , except where noted otherwise)

Sample	Date	Depth (feet)	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260
PP-SB-EB	12/3/2014	--	<0.032	<0.096	<0.096	<0.096	<0.096	<0.096	<0.034

Abbreviations:

PCBs = Polychlorinated Biphenyls

 $\mu\text{g}/\text{L}$  = Micrograms per liter

Notes:

The NR 140 preventive action limit for total PCBs is 0.003  $\mu\text{g}/\text{L}$ . The NR 140 ES for total PCBs is 0.03  $\mu\text{g}/\text{L}$ .

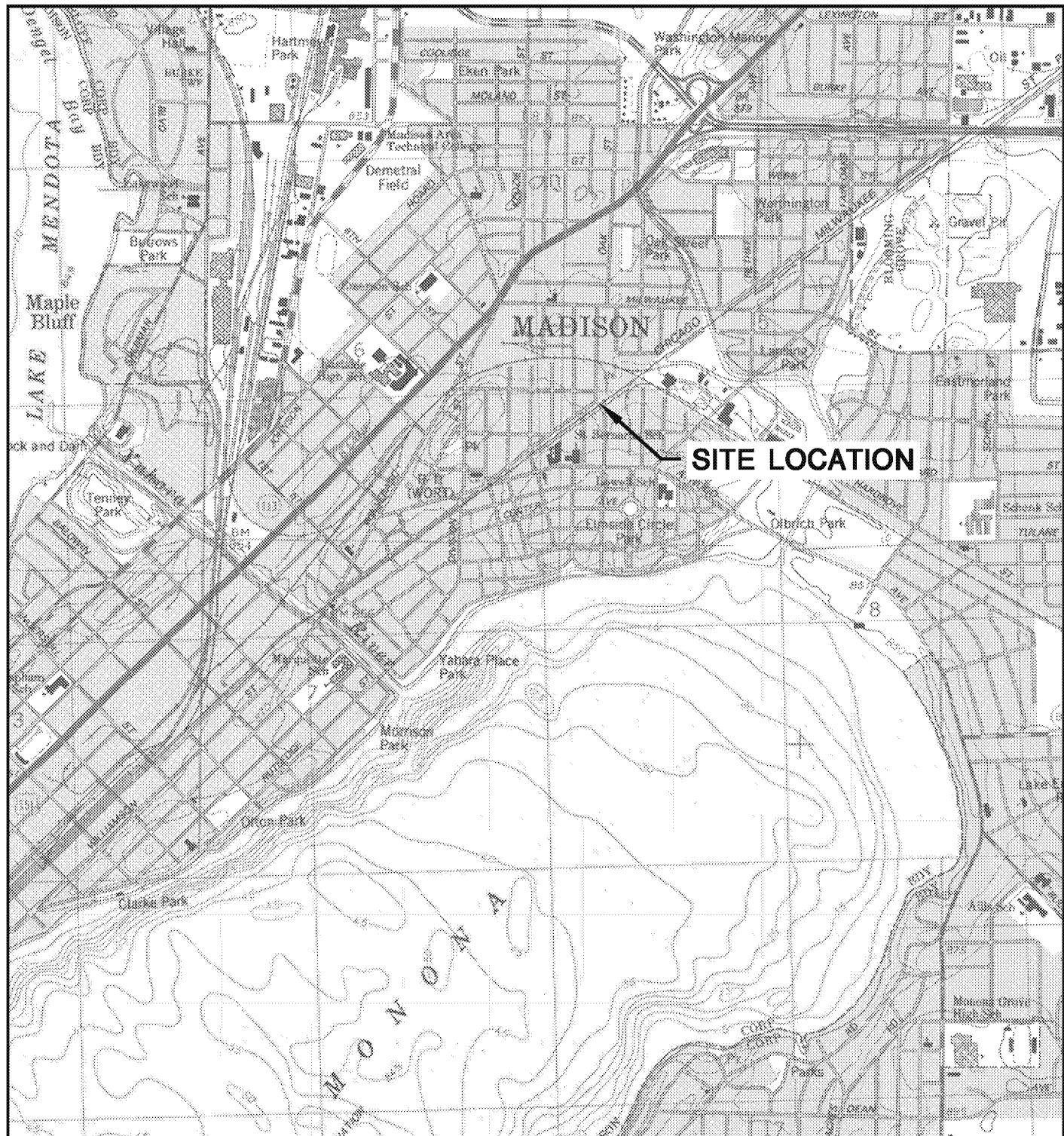
Created by: TLC Date: 12/15/2014  
 Last revision by: MDB Date: 12/18/2014  
 Checked by: PRH Date: 12/18/2014

I:\25212326\Tables-General\Pankratz Property\[11\_EB\_PCBs.xls]Soil PCBs

## FIGURES

- 1 Site Location Map
- 2 Site Plan

DRAFT



MADISON EAST QUADRANGLE

WISCONSIN—DANE CO.

7.5 MINUTE SERIES (TOPOGRAPHIC)

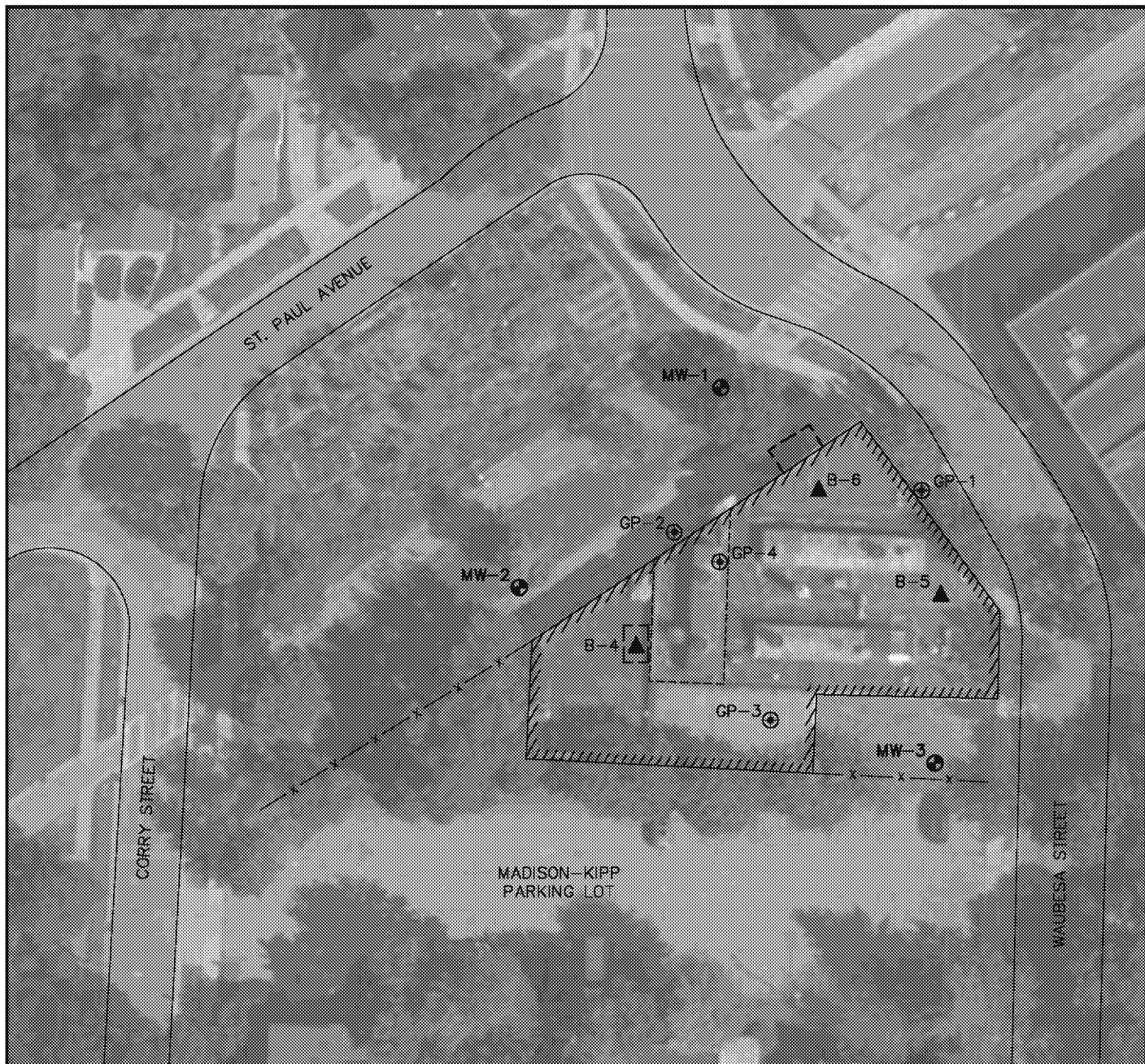
SE/4 MADISON 15' QUADRANGLE

1983

SCALE: 1" = 2,000'



CLIENT  CITY OF MADISON ENGINEERING DIVISION 210 MARTIN LUTHER KING JR. BLVD. MADISON, WI 53703	SITE FORMER MADISON BRASS WORKS 206-214 WAUBESA ST. MADISON, WISCONSIN	SITE LOCATION MAP	
PROJECT NO. 25212326.00	DRAWN BY: AHB	ENGINEER <b>SCS ENGINEERS</b> 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	FIGURE 1
DRAWN: 10/07/14	CHECKED BY: LB		
REVISED: 10/07/14	APPROVED BY:		



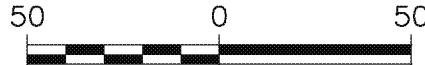
## LEGEND

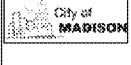
- APPROXIMATE FORMER TANK EXCAVATION LIMITS
- ⊕ APPROXIMATE SOIL BORING LOCATION
- ▲ APPROXIMATE SUB-SLAB VAPOR SAMPLE LOCATION
- APPROXIMATE MONITORING WELL LOCATION

## NOTE:

MW-1 HAS APPARENTLY BEEN PAVED OVER.

N



CLIENT  CITY OF MADISON 210 MARTIN LUTHER KING JR. BLVD. MADISON, WI 53703	SITE THOMAS F PANKRATZ PROPERTY/ FORMER MADISON BRASS WORKS 206-214 WAUBESA STREET MADISON, WISCONSIN	SITE PLAN	
PROJECT NO. 25212326.00	DRAWN BY: AHB	ENGINEER	FIGURE
DRAWN: 01/15/15	CHECKED BY: MDB	SCS ENGINEERS 2830 DAIRY DRIVE MADISON, WI 53718-6751 PHONE: (608) 224-2830	2
REVISED: 01/15/15	APPROVED BY: EO 01/15/15		

**ATTACHMENT A**

Soil Boring Logs and Abandonment Forms



State of Wisconsin  
Department of Natural Resources

Route To:

- Watershed/Wastewater  
 Remediation/Redev.  
 Waste Management     Other \_\_\_\_\_

## SOIL BORING LOG INFORMATION

Form 4400-122

7-98 bt2

Page 1

Facility/Project Name <i>Pankratz Property/Madison Brass</i>		# 25212326 T 7	License/Permit/Monitoring Number		Boring Number GP-1							
Boring Drilled By (Firm name and name of crew chief) <i>On-Site Environmental - Dusty</i>		Drilling Started 12/2/14		Drilling Completed 12/2/14	Drilling Method DPT							
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Static Water Level Feet	Surface Elevation Feet	Borehole Diam. Inches 2							
Boring Location State Plane 1/4 of 1/4 of Section , T. N. R. E.		Lat. Long.		Local Grid Location (If applicable) Feet N., Feet E.								
County <i>Dane</i>	DNR County Code <i>13</i>		Civil Town/City/or Village <i>Madison</i>									
Sample		Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Max. PID/FID	Soil Properties		P200	RQD/ Comments
Number	Length Recovered								Standard Penetration	Moisture Content		
S1	48			SILT, dark brown, little fine to medium sand (topsoil)	ML			0.1	M			
S2			2	SILTY CLAY, medium brown, massive	CL			0.3	M			
S3	48		3	SILTY SAND, medium brown, fine to medium grained.	SM			0.5	M/W			
S4			4	SILTY CLAY, medium brown, massive, little fine to medium sand, trace sticks, trace cinders?	CL			0.5	W	perched		
S5	24		5	SILTY SAND, medium brown, sand fine to coarse medium, trace clay	SM			0.3	M			
			6	SILTY CLAY, medium brown	CL							
			7	SILTY SAND, medium brown, sand fine to coarse, some small & large gravel.	SM							
			8	EOB @ 12' - refusal								
			9									
			10									
			11									
			12									
			13									
			14									
			15									

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

*Myra Blayff*

Firm

*SCS Engineers*

This form is authorized by Chapters 281,283,289,291,292,295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture between \$10 and \$25,000, or imprisonment for up to one year, depending on program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information.

State of Wisconsin  
Department of Natural Resources

Route To:

- Watershed/Wastewater  
 Remediation/Redev.  
 Waste Management     Other

## SOIL BORING LOG INFORMATION

Form 4400-122

7-98 bt2

Page 1

Facility/Project Name # 25212326 (T7)				License/Permit/Monitoring Number			Boring Number GP-2				
Boring Drilled By (Firm name and name of crew chief) On-Site Environmental - Dusty				Drilling Started 12/2/14	Drilling Completed 12/2/14	Drilling Method DPT					
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Static Water Level Feet		Surface Elevation Feet	Borehole Diam. Inches					
Boring Location NW/sw 55 T7N R10E State Plane 1/4 of 1/4 of Section , T. N., R. E.				Lat.	Long.	Local Grid Location (If applicable) Feet N., Feet E.					
County Dane	DNR County Code 13			Civil Town/City or Village Madison							
Sample	Length Recovered	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Max. PID/FID	Soil Properties	RQD/Comments	
Number									Standard Penetration	Moisture Content	P200
S1	48		-	SILTY GRAVEL, tan (asphalt base course)	GM			0.4	M		
			-	SILTY SAND, black, some cinders	SM			0.2	M		
			2	SILTY CLAY, medium brown, few orange & tan mottles	CL			0.2	M		
S2			3					0.2	M		
			4					0.2	M		
			5					0.2	M		
S3			6					0.2	M		
			7	SILTY CLAY, little fine to medium sand, medium brown	CL			0.2	M		
S4			8	CLAYEY SAND, medium brown, massive, sand is fine to med.	SC			0.2	M/w		
			9					0.2	M/w		
			10	POORLY GRADED SAND, tan, fine to medium	SP			0.3	M		
S5			11					0.4	w		
			12	SILTY SAND, light brown, fine to medium grained, some small & large gravel	SM			0.4	wet @ ~13'		
S6			13								
			14								
			15	EoB @ 15'							

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm

SCS Engineers

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State of Wisconsin  
Department of Natural Resources

Route To:

- Watershed/Wastewater  
 Remediation/Redev.  
 Waste Management     Other \_\_\_\_\_

## SOIL BORING LOG INFORMATION

Form 4400-122

7-98 bt2

Page 1

Facility/Project Name <b>#25212326 (T7)</b>				License/Permit/Monitoring Number		Boring Number <b>GP-3</b>				
Boring Drilled By (Firm name and name of crew chief) <b>On-Site Environmental - Dusty</b>				Drilling Started <b>12/2/14</b>	Drilling Completed <b>12/2/14</b>	Drilling Method <b>DPT</b>				
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Static Water Level Feet		Surface Elevation Feet	Borehole Diam. Inches <b>2</b>				
Boring Location State Plane 1/4 of 1/4 of Section , T. N., R. E.		Lat. Long.		Local Grid Location (If applicable) Feet      N.,      Feet      E.						
County <b>Dane</b>	DNR County Code <b>13</b>		Civil Town/City or Village <b>Madison</b>							
Sample	Length Recovered	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Max. PID/FID	Soil Properties	RQD/Comments
S1	24		1	CONCRETE SILTY SAND, black, some cinders (fill)	SM			1.2	M	
S2			2	SILT, medium brown, trace small-medium sand, trace clay, trace sticks	ML			0.8	M	
S3	45		3					0.6	M	
S4			4					0.6	M	
S5			5					0.8	M	
S6			6					0.5	M	
S7	36		7	SILTY SAND, medium brown, fine - medium grained.	SM			0.5	M	
S8	24		8					0.5	M	
			9							
			10							
			11							
			12							
			13							
			14							
			15							

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm

**SCS Engineers**

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## Department of Natural Resources

Boring Number: GP-3

Use only as an attachment to Form 4400-122.

Form 4400-122A

10-92

Page 2

Sample		Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit		Soil Properties
Number	Length Recovered		Blow Counts	USCS	
		16	same as above	SM	Standard Penetration
		17	EOB @ 16'		Moisture Content
		18			P200
		19			RQD/
		20			Comments
		21			
		22			
		23			
		24			
		25			
		26			
		27			
		28			
		29			
		30			
		31			
		32			
		33			
		34			
		35			

State of Wisconsin  
Department of Natural Resources

Route To:

- Watershed/Wastewater  
 Remediation/Redev.  
 Waste Management     Other

## SOIL BORING LOG INFORMATION

Form 4400-122

7-98 bt2

Page 1

Facility/Project Name <b>#25212326 (T7)</b>				License/Permit/Monitoring Number			Boring Number <b>GIP-4</b>			
Boring Drilled By (Firm name and name of crew chief) <b>On-Site Environmental - Dusty</b>				Drilling Started <b>12/2/14</b>	Drilling Completed <b>12/2/14</b>	Drilling Method <b>DPT</b>				
DNR Facility Well No.	WI Unique Well No.	Common Well Name	Static Water Level Feet	Surface Elevation Feet	Borehole Diam. Inches					
Boring Location State Plane 1/4 of 1/4 of Section , T. N., R. E.				Lat. Long.	Local Grid Location (If applicable) Feet      N.,      Feet      E.					
County <b>Dane</b>			DNR County Code <b>13</b>		Civil Town/City or Village <b>Madison</b>					
Number	Sample	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Soil Properties		RQD/ Comments
	Length Recovered							Max. P/D/FID	Standard Penetration	
S1	2"		-	GRAVEL, little silt, trace cinders	GM			6.8	M	
S2	6"		- 2 3 4 5 6 7 8 9 10 11 12 13 14 15	SILT, some gravel, medium brown	ML			27.2	M	
S3	48		-	SILTY SAND, light brown, fine to medium, trace coarse sand; small gravel	SM			3.6	M	
S4			-	EOB @ 12' - refusal				1.3	M	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm

**SCS Engineers**

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State of Wis., Dept. of Natural Resources  
dnr.wi.gov

SCS #:

### Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

## Route to:

- Drinking Water  
 Waste Management

- Watershed/Wastewater  
 Other:

- Remediation/Redevelopment

**1. Well Location Information**

County <b>Dane</b>	WI Unique Well # of Removed Well	Hicap # <b>G P - 1</b>
-----------------------	----------------------------------	---------------------------

Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)
— ° — — —	' N	
— ° — — —	' W	

1/4 NW or Gov't Lot #	1/4 SW	Section <b>5</b>	Township <b>7P</b>	Range <b>E</b>
--------------------------	--------	---------------------	-----------------------	-------------------

Well Street Address <b>206 Waukesha St.</b>		
--	--	--

Well City, Village or Town <b>Madison</b>	Well ZIP Code <b>53704</b>
--	-------------------------------

Subdivision Name	Lot #
------------------	-------

Reason For Removal From Service <b>temp. borehole</b>	WI Unique Well # of Replacement Well
--	--------------------------------------

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) <b>12/2/14</b>
---	---

If a Well Construction Report is available, please attach.

Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <b>DPT</b>		
--	--	--

Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock
---	----------------------------------

Total Well Depth From Ground Surface (ft.) <b>12</b>	Casing Diameter (in.)
---	-----------------------

Lower Drillhole Diameter (in.) <b>2</b>	Casing Depth (ft.)
--	--------------------

Was well annular space grouted?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
---------------------------------	------------------------------	-----------------------------	----------------------------------

If yes, to what depth (feet)?	Depth to Water (feet)		
-------------------------------	-----------------------	--	--

5. Material Used To Fill Well / Drillhole			
---	--	--	--

<b>3/8" bentonite chips</b>			
-----------------------------	--	--	--

**2. Facility / Owner Information**

Facility Name
---------------

<b>Pankratz Property</b>
--------------------------

Facility ID (FID or PWS)
--------------------------

License/Permit/Monitoring #
-----------------------------

Original Well Owner
---------------------

Present Well Owner
--------------------

Mailing Address of Present Owner
----------------------------------

City of Present Owner
-----------------------

State
-------

ZIP Code
----------

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?
--------------------------

- Yes  No  N/A

Liner(s) removed?
-------------------

- Yes  No  N/A

Screen removed?
-----------------

- Yes  No  N/A

Casing left in place?
-----------------------

- Yes  No  N/A

Was casing cut off below surface?
-----------------------------------

- Yes  No  N/A

Did sealing material rise to surface?
---------------------------------------

- Yes  No  N/A

Did material settle after 24 hours?
-------------------------------------

- Yes  No  N/A

If yes, was hole retopped?
----------------------------

- Yes  No  N/A

If bentonite chips were used, were they hydrated with water from a known safe source?
---

- Yes  No  N/A

## Required Method of Placing Sealing Material

<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
---	--

- Yes  No  N/A

<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)
---

- Yes  No  N/A

<input type="checkbox"/> Other (Explain): _____
---

## Sealing Materials

<input type="checkbox"/> Neat Cement Grout
--

- Clay-Sand Slurry (11 lb./gal. wt.)

<input type="checkbox"/> Sand-Cement (Concrete) Grout
---

- Bentonite-Sand Slurry " "

<input type="checkbox"/> Concrete
-----------------------------------

- Bentonite Chips

<input type="checkbox"/> Other (Explain): _____
---

## For Monitoring Wells and Monitoring Well Boreholes Only:

<input type="checkbox"/> Bentonite Chips
--

- Bentonite - Cement Grout

<input type="checkbox"/> Granular Bentonite
---

- Bentonite - Sand Slurry

**6. Comments****7. Supervision of Work**

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
--	-----------	--

SCS Engineers		<b>12/2/14</b>
---------------	--	----------------

Street or Route	Telephone Number	Comments
-----------------	------------------	----------

2830 Dairy Drive	( 608 ) 224-2830	
------------------	------------------	--

City	State	ZIP Code	Signature of Person Doing Work
------	-------	----------	--------------------------------

Madison	WI	53718	<b>M. Pankratz</b>
---------	----	-------	--------------------

			Date Signed
--	--	--	-------------

<b>12/4/14</b>
----------------

State of Wis., Dept. of Natural Resources  
dnr.wi.gov

SCS #:

### Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08) Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

<input type="checkbox"/> <b>Verification Only of Fill and Seal</b>			<b>Route to:</b> <input type="checkbox"/> Drinking Water <input type="checkbox"/> Watershed/Wastewater <input type="checkbox"/> Remediation/Redevelopment <input type="checkbox"/> Waste Management <input type="checkbox"/> Other: _____																																
<b>1. Well Location Information</b> County <b>Dane</b> WI Unique Well # of Removed Well <b>G7P-2</b> Latitude / Longitude (Degrees and Minutes) <b>43° 1' N</b> Method Code (see instructions) <b>1/1 NW 1/4 SW</b> Section <b>5</b> Township <b>7 N</b> Range <b>1C E</b> or Gov't Lot # <b>5</b> W			<b>2. Facility / Owner Information</b> Facility Name <b>Parkrate Property</b> Facility ID (FID or PWS) License/Permit/Monitoring # Original Well Owner <b>John</b> Present Well Owner <b>Thomas Parkratz</b> Mailing Address of Present Owner City of Present Owner      State      ZIP Code																																
<b>3. Well / Drillhole / Borehole Information</b> Reason For Removal From Service <b>Temp. borehole</b> WI Unique Well # of Replacement Well <b>47</b> <input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole Original Construction Date (mm/dd/yyyy) <b>12/2/14</b> If a Well Construction Report is available, please attach.			<b>4. Pump, Liner, Screen, Casing &amp; Sealing Material</b> Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Screen removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Casing left in place? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Was casing cut off below surface? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Did material settle after 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A																																
Construction Type: <input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input checked="" type="checkbox"/> Other (specify): <b>DPT</b>			Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock																																
Total Well Depth From Ground Surface (ft.) <b>15</b> Casing Diameter (in.) <b>2</b>			Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips) <input type="checkbox"/> Other (Explain): _____																																
Lower Drillhole Diameter (in.) <b>2</b> Casing Depth (ft.) <b>15</b>			Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry " <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Bentonite Chips																																
Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown			For Monitoring Wells and Monitoring Well Boreholes Only: <input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry																																
<b>5. Material Used To Fill Well / Drillhole</b> <b>3/8" bentonite chips</b>			From (ft.)    To (ft.)    No. Yards, Sacks Sealant or Volume (circle one)    Mix Ratio or Mud Weight Surface <b>15</b> <b>.3 ft<sup>3</sup></b> <b>dry mix</b>																																
<b>6. Comments</b>																																			
<b>7. Supervision of Work</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="width: 50%;">Name of Person or Firm Doing Filling &amp; Sealing</td> <td style="width: 15%;">License #</td> <td colspan="2" style="width: 30%;">Date of Filling &amp; Sealing (mm/dd/yyyy)</td> <td style="width: 10%;">DNR Use Only</td> </tr> <tr> <td colspan="2">SCS Engineers</td> <td></td> <td colspan="2"><b>12/2/14</b></td> <td>Date Received    Noted By</td> </tr> <tr> <td colspan="3">Street or Route 2830 Dairy Drive</td> <td colspan="2">Telephone Number (608) 224-2830</td> <td>Comments</td> </tr> <tr> <td colspan="2">City Madison</td> <td>State WI</td> <td>ZIP Code 53718</td> <td colspan="2">Signature of Person Doing Work <i>Megan Blaylock</i></td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> <td colspan="2">Date Signed <b>12/14/14</b></td> </tr> </table>						Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing (mm/dd/yyyy)		DNR Use Only	SCS Engineers			<b>12/2/14</b>		Date Received    Noted By	Street or Route 2830 Dairy Drive			Telephone Number (608) 224-2830		Comments	City Madison		State WI	ZIP Code 53718	Signature of Person Doing Work <i>Megan Blaylock</i>						Date Signed <b>12/14/14</b>	
Name of Person or Firm Doing Filling & Sealing		License #	Date of Filling & Sealing (mm/dd/yyyy)		DNR Use Only																														
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Street or Route 2830 Dairy Drive			Telephone Number (608) 224-2830		Comments																														
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				Date Signed <b>12/14/14</b>																															

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**Well / Drillhole / Borehole Filling & Sealing**  
Form 3300-005 (R 4/08)  
Page 1 of 2

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<input type="checkbox"/> Verification Only of Fill and Seal		Route to:																																										
		<input type="checkbox"/> Drinking Water	<input type="checkbox"/> Watershed/Wastewater	<input type="checkbox"/> Remediation/Redevelopment																																								
		<input type="checkbox"/> Waste Management	<input type="checkbox"/> Other: _____																																									
<b>1. Well Location Information</b> <table border="1"> <tr> <td>County <i>Dane</i></td> <td>WI Unique Well # of Removed Well _____</td> <td>Hicap # <i>GPR-3</i></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">Latitude / Longitude (Degrees and Minutes)</td> <td colspan="3">Method Code (see instructions)</td> </tr> <tr> <td colspan="2">____ ° ____ ' N</td> <td colspan="3"></td> </tr> <tr> <td colspan="2">____ ° ____ ' W</td> <td colspan="3"></td> </tr> <tr> <td>1/4 1/4 NW 1/4 SW or Gov't Lot #</td> <td>Section 5</td> <td>Township 7 N</td> <td>Range 10 E</td> <td></td> </tr> <tr> <td colspan="5">Well Street Address <i>206 Wanbesa St.</i></td> </tr> <tr> <td colspan="2">Well City, Village or Town <i>Madison</i></td> <td colspan="3">Well ZIP Code <i>53709</i></td> </tr> <tr> <td colspan="2">Subdivision Name</td> <td colspan="3">Lot #</td> </tr> </table>					County <i>Dane</i>	WI Unique Well # of Removed Well _____	Hicap # <i>GPR-3</i>			Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)			____ ° ____ ' N					____ ° ____ ' W					1/4 1/4 NW 1/4 SW or Gov't Lot #	Section 5	Township 7 N	Range 10 E		Well Street Address <i>206 Wanbesa St.</i>					Well City, Village or Town <i>Madison</i>		Well ZIP Code <i>53709</i>			Subdivision Name		Lot #		
County <i>Dane</i>	WI Unique Well # of Removed Well _____	Hicap # <i>GPR-3</i>																																										
Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)																																										
____ ° ____ ' N																																												
____ ° ____ ' W																																												
1/4 1/4 NW 1/4 SW or Gov't Lot #	Section 5	Township 7 N	Range 10 E																																									
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Subdivision Name		Lot #																																										
Reason For Removal From Service <i>temp. borehole</i>		WI Unique Well # of Replacement Well _____																																										
<b>3. Well / Drillhole / Borehole Information</b> <table border="1"> <tr> <td rowspan="3"><input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole</td> <td>Original Construction Date (mm/dd/yyyy) <i>12/2/14</i></td> </tr> <tr> <td>If a Well Construction Report is available, please attach.</td> </tr> <tr> <td><input type="checkbox"/> Drilled    <input type="checkbox"/> Driven (Sandpoint)    <input type="checkbox"/> Dug</td> </tr> <tr> <td colspan="2"><input checked="" type="checkbox"/> Other (specify): <i>DPT</i></td> </tr> <tr> <td colspan="2">Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation    <input type="checkbox"/> Bedrock</td> </tr> <tr> <td colspan="2">Total Well Depth From Ground Surface (ft.) <i>16</i></td> <td colspan="3">Casing Diameter (in.)</td> </tr> <tr> <td colspan="2">Lower Drillhole Diameter (in.) <i>2</i></td> <td colspan="3">Casing Depth (ft.)</td> </tr> <tr> <td colspan="2">Was well annular space grouted?    <input type="checkbox"/> Yes    <input type="checkbox"/> No    <input type="checkbox"/> Unknown</td> <td colspan="3"></td> </tr> <tr> <td colspan="2">If yes, to what depth (feet)?</td> <td colspan="3">Depth to Water (feet)</td> </tr> </table>					<input type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) <i>12/2/14</i>	If a Well Construction Report is available, please attach.	<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug	<input checked="" type="checkbox"/> Other (specify): <i>DPT</i>		Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Total Well Depth From Ground Surface (ft.) <i>16</i>		Casing Diameter (in.)			Lower Drillhole Diameter (in.) <i>2</i>		Casing Depth (ft.)			Was well annular space grouted? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown					If yes, to what depth (feet)?		Depth to Water (feet)														
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<b>6. Comments</b>																																												

<b>7. Supervision of Work</b>				<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing SCS Engineers		License #	Date of Filling & Sealing (mm/dd/yyyy) <i>12/2/14</i>	Date Received	Noted By
Street or Route 2830 Dairy Drive		Telephone Number ( 608 ) 224-2830		Comments	
City Madison		State WI	ZIP Code 53718	Signature of Person Doing Work <i>Mgr Bluff</i>	
				Date Signed <i>12/4/14</i>	

State of Wis., Dept. of Natural Resources  
dnr.wi.gov

SCS #:

### Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

 **Verification Only of Fill and Seal****Route to:**

- Drinking Water  
 Waste Management

- Watershed/Wastewater  
 Other:

- Remediation/Redevelopment

**1. Well Location Information**

County <i>Dane</i>	WI Unique Well # of Removed Well _____	Hicap # <i>GP-4</i>
-----------------------	---	------------------------

Latitude / Longitude (Degrees and Minutes)		Method Code (see instructions)		
____ ° ____ ' N				
____ ° ____ ' W				

1/1/ sec or Gov't Lot #	Section <i>5</i>	Township <i>7</i>	Range <i>10</i>	E W
----------------------------	---------------------	----------------------	--------------------	--------

Well Street Address <i>206 Waukesha St.</i>				
Well City, Village or Town <i>Madison</i>		Well ZIP Code <i>53704</i>		

Subdivision Name		Lot #		
------------------	--	-------	--	--

Reason For Removal From Service <i>temp. borehole</i>	WI Unique Well # of Replacement Well _____
--	---

**3. Well / Drillhole / Borehole Information**

<input type="checkbox"/> Monitoring Well	Original Construction Date (mm/dd/yyyy) <i>12/2/14</i>		
<input type="checkbox"/> Water Well	If a Well Construction Report is available, please attach.		
<input checked="" type="checkbox"/> Borehole / Drillhole			

Construction Type:			
<input type="checkbox"/> Drilled	<input type="checkbox"/> Driven (Sandpoint)	<input type="checkbox"/> Dug	
<input checked="" type="checkbox"/> Other (specify): _____			

Formation Type:			
<input checked="" type="checkbox"/> Unconsolidated Formation	<input type="checkbox"/> Bedrock		

Total Well Depth From Ground Surface (ft.) <i>12</i>	Casing Diameter (in.)
---	-----------------------

Lower Drillhole Diameter (in.) <i>2</i>	Casing Depth (ft.)
--	--------------------

Was well annular space grouted?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Unknown
---------------------------------	------------------------------	-----------------------------	----------------------------------

If yes, to what depth (feet)?	Depth to Water (feet)		
-------------------------------	-----------------------	--	--

5. Material Used To Fill Well / Drillhole			
<i>3/8" bentonite chips</i>			

**6. Comments**

7. Supervision of Work			
Name of Person or Firm Doing Filling & Sealing <i>SCS Engineers</i>	License #	Date of Filling & Sealing (mm/dd/yyyy) <i>12/2/14</i>	Date Received

Street or Route 2830 Dairy Drive	Telephone Number (608) 224-2830	Comments
-------------------------------------	------------------------------------	----------

City Madison	State WI	ZIP Code 53718	Signature of Person Doing Work <i>J. Blattner</i>	Date Signed <i>12/4/14</i>
-----------------	-------------	-------------------	--	-------------------------------

**2. Facility / Owner Information**

Facility Name <i>Pankratz Property</i>
---

Facility ID (FID or PWS)
--------------------------

License/Permit/Monitoring #
-----------------------------

Original Well Owner
---------------------

Present Well Owner <i>Thomas Pankratz</i>
--

Mailing Address of Present Owner
----------------------------------

City of Present Owner	State	ZIP Code
-----------------------	-------	----------

**4. Pump, Liner, Screen, Casing & Sealing Material**

Pump and piping removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
--------------------------	------------------------------	-----------------------------	---

Liner(s) removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
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Screen removed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
-----------------	------------------------------	-----------------------------	---

Casing left in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
-----------------------	------------------------------	-----------------------------	---

Was casing cut off below surface?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
-----------------------------------	------------------------------	-----------------------------	---

Did sealing material rise to surface?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
---------------------------------------	---	-----------------------------	------------------------------

Did material settle after 24 hours?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
-------------------------------------	------------------------------	-----------------------------	---

If yes, was hole retopped?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
----------------------------	------------------------------	-----------------------------	------------------------------

If bentonite chips were used, were they hydrated with water from a known safe source?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
---	------------------------------	--	------------------------------

Required Method of Placing Sealing Material
---

<input type="checkbox"/> Conductor Pipe-Gravity	<input type="checkbox"/> Conductor Pipe-Pumped
---	--

<input checked="" type="checkbox"/> Screened & Poured (Bentonite Chips)	Other (Explain): _____
---	------------------------

Sealing Materials
-------------------

<input type="checkbox"/> Neat Cement Grout	<input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.)
--	---

<input type="checkbox"/> Sand-Cement (Concrete) Grout	<input type="checkbox"/> Bentonite-Sand Slurry "
---	--

<input type="checkbox"/> Concrete	<input checked="" type="checkbox"/> Bentonite Chips
-----------------------------------	---

For Monitoring Wells and Monitoring Well Boreholes Only:	
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<input type="checkbox"/> Bentonite Chips	<input type="checkbox"/> Bentonite - Cement Grout
--	---

<input type="checkbox"/> Granular Bentonite	<input type="checkbox"/> Bentonite - Sand Slurry
---	--

**ATTACHMENT B**

Analytical Laboratory Reports



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-88892-1

TestAmerica Sample Delivery Group: 25212326.00

Client Project/Site: Madison Brownfield - Pankratz Property

For:

SCS Engineers

2830 Dairy Dr

Madison, Wisconsin 53718

Attn: Mr. Eric Oelkers



Authorized for release by:

12/11/2014 5:43:20 PM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: SCS Engineers  
Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
SDG: 25212326.00

Job ID: 500-88892-1

Laboratory: TestAmerica Chicago

### Narrative

Job Narrative  
500-88892-1

### Comments

No additional comments.

### Receipt

The samples were received on 12/4/2014 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

### Air - GC/MS VOA

Method(s) TO 14A, TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by TestAmerica Knoxville.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

## Detection Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

Client Sample ID: PP-VP-B-4

Lab Sample ID: 500-88892-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.2		0.64	0.18	ug/m <sup>3</sup>	1		TO-15	Total/NA
Carbon tetrachloride	0.37 J		1.3	0.24	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.59 J		1.2	0.38	ug/m <sup>3</sup>	1		TO-15	Total/NA
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,2-Dichloroethane	0.29 J		0.81	0.19	ug/m <sup>3</sup>	1		TO-15	Total/NA
Ethylbenzene	6.4		0.87	0.30	ug/m <sup>3</sup>	1		TO-15	Total/NA
Methylene Chloride	1.1 J B		1.7	0.45	ug/m <sup>3</sup>	1		TO-15	Total/NA
m-Xylene & p-Xylene	10		0.87	0.52	ug/m <sup>3</sup>	1		TO-15	Total/NA
o-Xylene	3.6		0.87	0.26	ug/m <sup>3</sup>	1		TO-15	Total/NA
Styrene	0.31 J		0.85	0.25	ug/m <sup>3</sup>	1		TO-15	Total/NA
Tetrachloroethene	2.4		1.4	0.27	ug/m <sup>3</sup>	1		TO-15	Total/NA
Toluene	19		0.75	0.45	ug/m <sup>3</sup>	1		TO-15	Total/NA
Trichloroethene	0.96 J		1.1	0.19	ug/m <sup>3</sup>	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.13	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50 J		1.5	0.24	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	2.8		0.98	0.31	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.67 J		0.98	0.32	ug/m <sup>3</sup>	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.68		0.20	0.056	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.059 J		0.20	0.038	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.098 J		0.20	0.064	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.071 J		0.20	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.5		0.20	0.068	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.33 J B		0.50	0.13	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	2.4		0.20	0.12	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.83		0.20	0.061	ppb v/v	1		TO-15	Total/NA
Styrene	0.073 J		0.20	0.058	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.35		0.20	0.040	ppb v/v	1		TO-15	Total/NA
Toluene	5.0		0.20	0.12	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.18 J		0.20	0.036	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.024	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.066 J		0.20	0.031	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.56		0.20	0.063	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.14 J		0.20	0.065	ppb v/v	1		TO-15	Total/NA

Client Sample ID: PP-VP-B-4-FD

Lab Sample ID: 500-88892-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.9		0.64	0.18	ug/m <sup>3</sup>	1		TO-15	Total/NA
Carbon tetrachloride	0.38 J		1.3	0.24	ug/m <sup>3</sup>	1		TO-15	Total/NA
Chloromethane	0.70 J		1.0	0.33	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.45 J		1.2	0.38	ug/m <sup>3</sup>	1		TO-15	Total/NA
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m <sup>3</sup>	1		TO-15	Total/NA
1,2-Dichloroethane	0.26 J		0.81	0.19	ug/m <sup>3</sup>	1		TO-15	Total/NA
Ethylbenzene	5.4		0.87	0.30	ug/m <sup>3</sup>	1		TO-15	Total/NA
Methylene Chloride	0.74 J B		1.7	0.45	ug/m <sup>3</sup>	1		TO-15	Total/NA
m-Xylene & p-Xylene	8.6		0.87	0.52	ug/m <sup>3</sup>	1		TO-15	Total/NA
o-Xylene	2.9		0.87	0.26	ug/m <sup>3</sup>	1		TO-15	Total/NA
Styrene	0.30 J		0.85	0.25	ug/m <sup>3</sup>	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Client Sample ID: PP-VP-B-4-FD (Continued)****Lab Sample ID: 500-88892-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.2		1.4	0.27	ug/m3	1		TO-15	Total/NA
Toluene	16		0.75	0.45	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.68	J	1.1	0.19	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.13	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	2.4		0.98	0.31	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.60	J	0.98	0.32	ug/m3	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59		0.20	0.056	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.061	J	0.20	0.038	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.34	J	0.50	0.16	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.075	J	0.20	0.064	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.065	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.2		0.20	0.068	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.21	J B	0.50	0.13	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	2.0		0.20	0.12	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.67		0.20	0.061	ppb v/v	1		TO-15	Total/NA
Styrene	0.071	J	0.20	0.058	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.32		0.20	0.040	ppb v/v	1		TO-15	Total/NA
Toluene	4.1		0.20	0.12	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.13	J	0.20	0.036	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.024	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.069	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.48		0.20	0.063	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.12	J	0.20	0.065	ppb v/v	1		TO-15	Total/NA

**Client Sample ID: PP-VP-B-5****Lab Sample ID: 500-88892-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.2		0.64	0.18	ug/m3	1		TO-15	Total/NA
1,4-Dichlorobenzene	1.0	J	1.2	0.38	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.5		0.99	0.34	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	0.70	J	0.81	0.19	ug/m3	1		TO-15	Total/NA
Ethylbenzene	14		0.87	0.30	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.88	J B	1.7	0.45	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	19		0.87	0.52	ug/m3	1		TO-15	Total/NA
o-Xylene	6.2		0.87	0.26	ug/m3	1		TO-15	Total/NA
Styrene	0.48	J	0.85	0.25	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	5.5		1.4	0.27	ug/m3	1		TO-15	Total/NA
Toluene	36		0.75	0.45	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	67		1.1	0.16	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.51	J	1.1	0.19	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.3		1.1	0.13	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.49	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.8		0.98	0.31	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.0		0.98	0.32	ug/m3	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0		0.20	0.056	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.17	J	0.20	0.064	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

Client Sample ID: PP-VP-B-5 (Continued)

Lab Sample ID: 500-88892-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.50		0.20	0.068	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.17	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	3.2		0.20	0.068	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.25	J B	0.50	0.13	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	4.4		0.20	0.12	ppb v/v	1		TO-15	Total/NA
o-Xylene	1.4		0.20	0.061	ppb v/v	1		TO-15	Total/NA
Styrene	0.11	J	0.20	0.058	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.81		0.20	0.040	ppb v/v	1		TO-15	Total/NA
Toluene	9.5		0.20	0.12	ppb v/v	1		TO-15	Total/NA
1,1,1-Trichloroethane	12		0.20	0.030	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.095	J	0.20	0.036	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.24		0.20	0.024	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.064	J	0.20	0.031	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.77		0.20	0.063	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.21		0.20	0.065	ppb v/v	1		TO-15	Total/NA

Client Sample ID: PP-VP-B-6

Lab Sample ID: 500-88892-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.1		0.64	0.18	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.24	J	1.3	0.24	ug/m3	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.95	J	1.2	0.38	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	0.69	J	0.81	0.19	ug/m3	1		TO-15	Total/NA
Ethylbenzene	8.9		0.87	0.30	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.1	J B	1.7	0.45	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	16		0.87	0.52	ug/m3	1		TO-15	Total/NA
o-Xylene	4.8		0.87	0.26	ug/m3	1		TO-15	Total/NA
Styrene	0.57	J	0.85	0.25	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	2.4		1.4	0.27	ug/m3	1		TO-15	Total/NA
Toluene	28		0.75	0.45	ug/m3	1		TO-15	Total/NA
1,1,1-Trichloroethane	5.9		1.1	0.16	ug/m3	1		TO-15	Total/NA
Trichloroethene	1.4		1.1	0.19	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	2.2		1.1	0.13	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.46	J	1.5	0.24	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.2		0.98	0.31	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.77	J	0.98	0.32	ug/m3	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.96		0.20	0.056	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.039	J	0.20	0.038	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.16	J	0.20	0.064	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.43		0.20	0.068	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.17	J	0.20	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	2.0		0.20	0.068	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.31	J B	0.50	0.13	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	3.6		0.20	0.12	ppb v/v	1		TO-15	Total/NA
o-Xylene	1.1		0.20	0.061	ppb v/v	1		TO-15	Total/NA
Styrene	0.13	J	0.20	0.058	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.35		0.20	0.040	ppb v/v	1		TO-15	Total/NA
Toluene	7.5		0.20	0.12	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Client Sample ID: PP-VP-B-6 (Continued)****Lab Sample ID: 500-88892-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.1		0.20	0.030	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.26		0.20	0.036	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.39		0.20	0.024	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.060 J		0.20	0.031	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.65		0.20	0.063	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.16 J		0.20	0.065	ppb v/v	1		TO-15	Total/NA

**Client Sample ID: PP-VP-EB****Lab Sample ID: 500-88892-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.64	0.18	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.56 J		1.3	0.24	ug/m3	1		TO-15	Total/NA
Chloromethane	1.0		1.0	0.33	ug/m3	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.65 J		1.2	0.38	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3	1		TO-15	Total/NA
1,2-Dichloroethane	0.62 J		0.81	0.19	ug/m3	1		TO-15	Total/NA
Ethylbenzene	6.8		0.87	0.30	ug/m3	1		TO-15	Total/NA
Methylene Chloride	1.3 J B		1.7	0.45	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	13		0.87	0.52	ug/m3	1		TO-15	Total/NA
o-Xylene	3.7		0.87	0.26	ug/m3	1		TO-15	Total/NA
Styrene	0.46 J		0.85	0.25	ug/m3	1		TO-15	Total/NA
Toluene	21		0.75	0.45	ug/m3	1		TO-15	Total/NA
Trichloroethene	0.95 J		1.1	0.19	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.2		1.1	0.13	ug/m3	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.54 J		1.5	0.24	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	2.7		0.98	0.31	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.72 J		0.98	0.32	ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.47		0.20	0.056	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.089 J		0.20	0.038	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.49		0.50	0.16	ppb v/v	1		TO-15	Total/NA
1,4-Dichlorobenzene	0.11 J		0.20	0.064	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v	1		TO-15	Total/NA
1,2-Dichloroethane	0.15 J		0.20	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	1.6		0.20	0.068	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.38 J B		0.50	0.13	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	2.9		0.20	0.12	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.85		0.20	0.061	ppb v/v	1		TO-15	Total/NA
Styrene	0.11 J		0.20	0.058	ppb v/v	1		TO-15	Total/NA
Toluene	5.6		0.20	0.12	ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.18 J		0.20	0.036	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.21		0.20	0.024	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.071 J		0.20	0.031	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.56		0.20	0.063	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.15 J		0.20	0.065	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Method Summary

Client: SCS Engineers  
Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
SDG: 25212326.00

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

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## Sample Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-88892-1	PP-VP-B-4	Air	12/02/14 15:10	12/04/14 09:40
500-88892-2	PP-VP-B-4-FD	Air	12/02/14 15:10	12/04/14 09:40
500-88892-3	PP-VP-B-5	Air	12/02/14 16:05	12/04/14 09:40
500-88892-4	PP-VP-B-6	Air	12/02/14 16:27	12/04/14 09:40
500-88892-5	PP-VP-EB	Air	12/02/14 15:30	12/04/14 09:40

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

Client Sample ID: PP-VP-B-4

Lab Sample ID: 500-88892-1

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.2		0.64	0.18	ug/m3			12/08/14 15:10	1
Benzyl chloride	<0.40		2.1	0.40	ug/m3			12/08/14 15:10	1
Bromomethane	<0.12		0.78	0.12	ug/m3			12/08/14 15:10	1
Carbon tetrachloride	0.37 J		1.3	0.24	ug/m3			12/08/14 15:10	1
Chlorobenzene	<0.23		0.92	0.23	ug/m3			12/08/14 15:10	1
Chloroethane	<0.092		0.53	0.092	ug/m3			12/08/14 15:10	1
Chloroform	<0.19		0.98	0.19	ug/m3			12/08/14 15:10	1
Chloromethane	<0.33		1.0	0.33	ug/m3			12/08/14 15:10	1
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m3			12/08/14 15:10	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m3			12/08/14 15:10	1
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m3			12/08/14 15:10	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m3			12/08/14 15:10	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m3			12/08/14 15:10	1
1,4-Dichlorobenzene	0.59 J		1.2	0.38	ug/m3			12/08/14 15:10	1
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3			12/08/14 15:10	1
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m3			12/08/14 15:10	1
1,2-Dichloroethane	0.29 J		0.81	0.19	ug/m3			12/08/14 15:10	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m3			12/08/14 15:10	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m3			12/08/14 15:10	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m3			12/08/14 15:10	1
Ethylbenzene	6.4		0.87	0.30	ug/m3			12/08/14 15:10	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m3			12/08/14 15:10	1
Methylene Chloride	1.1 J B		1.7	0.45	ug/m3			12/08/14 15:10	1
m-Xylene & p-Xylene	10		0.87	0.52	ug/m3			12/08/14 15:10	1
o-Xylene	3.6		0.87	0.26	ug/m3			12/08/14 15:10	1
Styrene	0.31 J		0.85	0.25	ug/m3			12/08/14 15:10	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m3			12/08/14 15:10	1
Tetrachloroethene	2.4		1.4	0.27	ug/m3			12/08/14 15:10	1
Toluene	19		0.75	0.45	ug/m3			12/08/14 15:10	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m3			12/08/14 15:10	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m3			12/08/14 15:10	1
1,1,1-Trichloroethane	<0.16		1.1	0.16	ug/m3			12/08/14 15:10	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m3			12/08/14 15:10	1
Trichloroethene	0.96 J		1.1	0.19	ug/m3			12/08/14 15:10	1
Trichlorofluoromethane	1.1		1.1	0.13	ug/m3			12/08/14 15:10	1
1,1,2-Trichloro-1,2,2-trifluoroetha ne	0.50 J		1.5	0.24	ug/m3			12/08/14 15:10	1
1,2,4-Trimethylbenzene	2.8		0.98	0.31	ug/m3			12/08/14 15:10	1
1,3,5-Trimethylbenzene	0.67 J		0.98	0.32	ug/m3			12/08/14 15:10	1
Vinyl chloride	<0.18		0.51	0.18	ug/m3			12/08/14 15:10	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.68		0.20	0.056	ppb v/v			12/08/14 15:10	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 15:10	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 15:10	1
Carbon tetrachloride	0.059 J		0.20	0.038	ppb v/v			12/08/14 15:10	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 15:10	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 15:10	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 15:10	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

**Client Sample ID:** PP-VP-B-4

**Lab Sample ID:** 500-88892-1

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<0.16		0.50	0.16	ppb v/v			12/08/14 15:10	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 15:10	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 15:10	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 15:10	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 15:10	1
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 15:10	1
1,4-Dichlorobenzene	0.098 J		0.20	0.064	ppb v/v			12/08/14 15:10	1
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v			12/08/14 15:10	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 15:10	1
1,2-Dichloroethane	0.071 J		0.20	0.047	ppb v/v			12/08/14 15:10	1
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 15:10	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 15:10	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 15:10	1
Ethylbenzene	1.5		0.20	0.068	ppb v/v			12/08/14 15:10	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 15:10	1
Methylene Chloride	0.33 JB		0.50	0.13	ppb v/v			12/08/14 15:10	1
m-Xylene & p-Xylene	2.4		0.20	0.12	ppb v/v			12/08/14 15:10	1
o-Xylene	0.83		0.20	0.061	ppb v/v			12/08/14 15:10	1
Styrene	0.073 J		0.20	0.058	ppb v/v			12/08/14 15:10	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 15:10	1
Tetrachloroethylene	0.35		0.20	0.040	ppb v/v			12/08/14 15:10	1
Toluene	5.0		0.20	0.12	ppb v/v			12/08/14 15:10	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 15:10	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 15:10	1
1,1,1-Trichloroethane	<0.030		0.20	0.030	ppb v/v			12/08/14 15:10	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 15:10	1
Trichloroethene	0.18 J		0.20	0.036	ppb v/v			12/08/14 15:10	1
Trichlorofluoromethane	0.20		0.20	0.024	ppb v/v			12/08/14 15:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.066 J		0.20	0.031	ppb v/v			12/08/14 15:10	1
1,2,4-Trimethylbenzene	0.56		0.20	0.063	ppb v/v			12/08/14 15:10	1
1,3,5-Trimethylbenzene	0.14 J		0.20	0.065	ppb v/v			12/08/14 15:10	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 15:10	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surrogate)	91		60 - 140					12/08/14 15:10	1

**Client Sample ID:** PP-VP-B-4-FD

**Lab Sample ID:** 500-88892-2

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.9		0.64	0.18	ug/m3			12/08/14 16:05	1
Benzyl chloride	<0.40		2.1	0.40	ug/m3			12/08/14 16:05	1
Bromomethane	<0.12		0.78	0.12	ug/m3			12/08/14 16:05	1
Carbon tetrachloride	0.38 J		1.3	0.24	ug/m3			12/08/14 16:05	1
Chlorobenzene	<0.23		0.92	0.23	ug/m3			12/08/14 16:05	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Client Sample ID: PP-VP-B-4-FD****Lab Sample ID: 500-88892-2**

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<0.092		0.53	0.092	ug/m3			12/08/14 16:05	1
Chloroform	<0.19		0.98	0.19	ug/m3			12/08/14 16:05	1
<b>Chloromethane</b>	<b>0.70</b>	<b>J</b>	<b>1.0</b>	<b>0.33</b>	<b>ug/m3</b>			<b>12/08/14 16:05</b>	<b>1</b>
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m3			12/08/14 16:05	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m3			12/08/14 16:05	1
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m3			12/08/14 16:05	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m3			12/08/14 16:05	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m3			12/08/14 16:05	1
1,4-Dichlorobenzene	0.45	J	1.2	0.38	ug/m3			12/08/14 16:05	1
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3			12/08/14 16:05	1
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m3			12/08/14 16:05	1
1,2-Dichloroethane	0.26	J	0.81	0.19	ug/m3			12/08/14 16:05	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m3			12/08/14 16:05	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m3			12/08/14 16:05	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m3			12/08/14 16:05	1
Ethylbenzene	5.4		0.87	0.30	ug/m3			12/08/14 16:05	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m3			12/08/14 16:05	1
Methylene Chloride	0.74	J B	1.7	0.45	ug/m3			12/08/14 16:05	1
m-Xylene & p-Xylene	8.6		0.87	0.52	ug/m3			12/08/14 16:05	1
o-Xylene	2.9		0.87	0.26	ug/m3			12/08/14 16:05	1
Styrene	0.30	J	0.85	0.25	ug/m3			12/08/14 16:05	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m3			12/08/14 16:05	1
Tetrachloroethene	2.2		1.4	0.27	ug/m3			12/08/14 16:05	1
Toluene	16		0.75	0.45	ug/m3			12/08/14 16:05	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m3			12/08/14 16:05	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m3			12/08/14 16:05	1
1,1,1-Trichloroethane	<0.16		1.1	0.16	ug/m3			12/08/14 16:05	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m3			12/08/14 16:05	1
Trichloroethene	0.68	J	1.1	0.19	ug/m3			12/08/14 16:05	1
Trichlorofluoromethane	1.1		1.1	0.13	ug/m3			12/08/14 16:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.53	J	1.5	0.24	ug/m3			12/08/14 16:05	1
Benzene	2.4		0.98	0.31	ug/m3			12/08/14 16:05	1
1,3,5-Trimethylbenzene	0.60	J	0.98	0.32	ug/m3			12/08/14 16:05	1
Vinyl chloride	<0.18		0.51	0.18	ug/m3			12/08/14 16:05	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.59		0.20	0.056	ppb v/v			12/08/14 16:05	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 16:05	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 16:05	1
Carbon tetrachloride	0.061	J	0.20	0.038	ppb v/v			12/08/14 16:05	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 16:05	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 16:05	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 16:05	1
Chloromethane	0.34	J	0.50	0.16	ppb v/v			12/08/14 16:05	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 16:05	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 16:05	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 16:05	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 16:05	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

**Client Sample ID: PP-VP-B-4-FD**

**Lab Sample ID: 500-88892-2**

Date Collected: 12/02/14 16:10

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 16:05	1
1,4-Dichlorobenzene	0.075 J		0.20	0.064	ppb v/v			12/08/14 16:05	1
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v			12/08/14 16:05	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 16:05	1
1,2-Dichloroethane	0.065 J		0.20	0.047	ppb v/v			12/08/14 16:05	1
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 16:05	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 16:05	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 16:05	1
Ethylbenzene	1.2		0.20	0.068	ppb v/v			12/08/14 16:05	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 16:05	1
Methylene Chloride	0.21 J B		0.50	0.13	ppb v/v			12/08/14 16:05	1
m-Xylene & p-Xylene	2.0		0.20	0.12	ppb v/v			12/08/14 16:05	1
o-Xylene	0.67		0.20	0.061	ppb v/v			12/08/14 16:05	1
Styrene	0.071 J		0.20	0.058	ppb v/v			12/08/14 16:05	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 16:05	1
Tetrachloroethene	0.32		0.20	0.040	ppb v/v			12/08/14 16:05	1
Toluene	4.1		0.20	0.12	ppb v/v			12/08/14 16:05	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 16:05	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 16:05	1
1,1,1-Trichloroethane	<0.030		0.20	0.030	ppb v/v			12/08/14 16:05	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 16:05	1
Trichloroethene	0.13 J		0.20	0.036	ppb v/v			12/08/14 16:05	1
Trichlorofluoromethane	0.20		0.20	0.024	ppb v/v			12/08/14 16:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.069 J		0.20	0.031	ppb v/v			12/08/14 16:05	1
1,2,4-Trimethylbenzene	0.48		0.20	0.063	ppb v/v			12/08/14 16:05	1
1,3,5-Trimethylbenzene	0.12 J		0.20	0.065	ppb v/v			12/08/14 16:05	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 16:05	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surrogate)	93		60 - 140					12/08/14 16:05	1

**Client Sample ID: PP-VP-B-5**

**Lab Sample ID: 500-88892-3**

Date Collected: 12/02/14 16:05

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.2		0.64	0.18	ug/m3			12/08/14 17:00	1
Benzyl chloride	<0.40		2.1	0.40	ug/m3			12/08/14 17:00	1
Bromomethane	<0.12		0.78	0.12	ug/m3			12/08/14 17:00	1
Carbon tetrachloride	<0.24		1.3	0.24	ug/m3			12/08/14 17:00	1
Chlorobenzene	<0.23		0.92	0.23	ug/m3			12/08/14 17:00	1
Chloroethane	<0.092		0.53	0.092	ug/m3			12/08/14 17:00	1
Chloroform	<0.19		0.98	0.19	ug/m3			12/08/14 17:00	1
Chloromethane	<0.33		1.0	0.33	ug/m3			12/08/14 17:00	1
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m3			12/08/14 17:00	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m3			12/08/14 17:00	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Client Sample ID: PP-VP-B-5****Lab Sample ID: 500-88892-3**

Date Collected: 12/02/14 16:05

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m3			12/08/14 17:00	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m3			12/08/14 17:00	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m3			12/08/14 17:00	1
1,4-Dichlorobenzene	1.0 J		1.2	0.38	ug/m3			12/08/14 17:00	1
Dichlorodifluoromethane	2.5		0.99	0.34	ug/m3			12/08/14 17:00	1
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m3			12/08/14 17:00	1
1,2-Dichloroethane	0.70 J		0.81	0.19	ug/m3			12/08/14 17:00	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m3			12/08/14 17:00	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m3			12/08/14 17:00	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m3			12/08/14 17:00	1
Ethylbenzene	14		0.87	0.30	ug/m3			12/08/14 17:00	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m3			12/08/14 17:00	1
Methylene Chloride	0.88 J B		1.7	0.45	ug/m3			12/08/14 17:00	1
m-Xylene & p-Xylene	19		0.87	0.52	ug/m3			12/08/14 17:00	1
o-Xylene	6.2		0.87	0.26	ug/m3			12/08/14 17:00	1
Styrene	0.48 J		0.85	0.25	ug/m3			12/08/14 17:00	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m3			12/08/14 17:00	1
Tetrachloroethene	5.5		1.4	0.27	ug/m3			12/08/14 17:00	1
Toluene	36		0.75	0.45	ug/m3			12/08/14 17:00	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m3			12/08/14 17:00	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m3			12/08/14 17:00	1
1,1,1-Trichloroethane	67		1.1	0.16	ug/m3			12/08/14 17:00	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m3			12/08/14 17:00	1
Trichloroethene	0.51 J		1.1	0.19	ug/m3			12/08/14 17:00	1
Trichlorofluoromethane	1.3		1.1	0.13	ug/m3			12/08/14 17:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.49 J		1.5	0.24	ug/m3			12/08/14 17:00	1
1,2,4-Trimethylbenzene	3.8		0.98	0.31	ug/m3			12/08/14 17:00	1
1,3,5-Trimethylbenzene	1.0		0.98	0.32	ug/m3			12/08/14 17:00	1
Vinyl chloride	<0.18		0.51	0.18	ug/m3			12/08/14 17:00	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0		0.20	0.056	ppb v/v			12/08/14 17:00	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 17:00	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 17:00	1
Carbon tetrachloride	<0.038		0.20	0.038	ppb v/v			12/08/14 17:00	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 17:00	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 17:00	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 17:00	1
Chloromethane	<0.16		0.50	0.16	ppb v/v			12/08/14 17:00	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 17:00	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 17:00	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 17:00	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 17:00	1
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 17:00	1
1,4-Dichlorobenzene	0.17 J		0.20	0.064	ppb v/v			12/08/14 17:00	1
Dichlorodifluoromethane	0.50		0.20	0.068	ppb v/v			12/08/14 17:00	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 17:00	1
1,2-Dichloroethane	0.17 J		0.20	0.047	ppb v/v			12/08/14 17:00	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

**Client Sample ID:** PP-VP-B-5

**Lab Sample ID:** 500-88892-3

Date Collected: 12/02/14 16:05

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 17:00	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 17:00	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 17:00	1
Ethylbenzene	3.2		0.20	0.068	ppb v/v			12/08/14 17:00	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 17:00	1
Methylene Chloride	0.25	J B	0.50	0.13	ppb v/v			12/08/14 17:00	1
m-Xylene & p-Xylene	4.4		0.20	0.12	ppb v/v			12/08/14 17:00	1
o-Xylene	1.4		0.20	0.061	ppb v/v			12/08/14 17:00	1
Styrene	0.11	J	0.20	0.058	ppb v/v			12/08/14 17:00	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 17:00	1
Tetrachloroethylene	0.81		0.20	0.040	ppb v/v			12/08/14 17:00	1
Toluene	9.5		0.20	0.12	ppb v/v			12/08/14 17:00	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 17:00	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 17:00	1
1,1,1-Trichloroethane	12		0.20	0.030	ppb v/v			12/08/14 17:00	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 17:00	1
Trichloroethylene	0.095	J	0.20	0.036	ppb v/v			12/08/14 17:00	1
Trichlorofluoromethane	0.24		0.20	0.024	ppb v/v			12/08/14 17:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.064	J	0.20	0.031	ppb v/v			12/08/14 17:00	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 17:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
4-Bromofluorobenzene (Surrogate)	97		60 - 140				12/08/14 17:00	1	

**Client Sample ID:** PP-VP-B-6

**Lab Sample ID:** 500-88892-4

Date Collected: 12/02/14 16:27

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	3.1		0.64	0.18	ug/m3			12/08/14 17:55	1
Benzyl chloride	<0.40		2.1	0.40	ug/m3			12/08/14 17:55	1
Bromomethane	<0.12		0.78	0.12	ug/m3			12/08/14 17:55	1
Carbon tetrachloride	0.24	J	1.3	0.24	ug/m3			12/08/14 17:55	1
Chlorobenzene	<0.23		0.92	0.23	ug/m3			12/08/14 17:55	1
Chloroethane	<0.092		0.53	0.092	ug/m3			12/08/14 17:55	1
Chloroform	<0.19		0.98	0.19	ug/m3			12/08/14 17:55	1
Chloromethane	<0.33		1.0	0.33	ug/m3			12/08/14 17:55	1
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m3			12/08/14 17:55	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m3			12/08/14 17:55	1
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m3			12/08/14 17:55	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m3			12/08/14 17:55	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m3			12/08/14 17:55	1
1,4-Dichlorobenzene	0.95	J	1.2	0.38	ug/m3			12/08/14 17:55	1
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3			12/08/14 17:55	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

Client Sample ID: PP-VP-B-6

Lab Sample ID: 500-88892-4

Date Collected: 12/02/14 16:27

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m <sup>3</sup>			12/08/14 17:55	1
1,2-Dichloroethane	0.69	J	0.81	0.19	ug/m <sup>3</sup>			12/08/14 17:55	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m <sup>3</sup>			12/08/14 17:55	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m <sup>3</sup>			12/08/14 17:55	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m <sup>3</sup>			12/08/14 17:55	1
Ethylbenzene	8.9		0.87	0.30	ug/m <sup>3</sup>			12/08/14 17:55	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m <sup>3</sup>			12/08/14 17:55	1
Methylene Chloride	1.1	J B	1.7	0.45	ug/m <sup>3</sup>			12/08/14 17:55	1
m-Xylene & p-Xylene	16		0.87	0.52	ug/m <sup>3</sup>			12/08/14 17:55	1
o-Xylene	4.8		0.87	0.26	ug/m <sup>3</sup>			12/08/14 17:55	1
Styrene	0.57	J	0.85	0.25	ug/m <sup>3</sup>			12/08/14 17:55	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m <sup>3</sup>			12/08/14 17:55	1
Tetrachloroethene	2.4		1.4	0.27	ug/m <sup>3</sup>			12/08/14 17:55	1
Toluene	28		0.75	0.45	ug/m <sup>3</sup>			12/08/14 17:55	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m <sup>3</sup>			12/08/14 17:55	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m <sup>3</sup>			12/08/14 17:55	1
1,1,1-Trichloroethane	5.9		1.1	0.16	ug/m <sup>3</sup>			12/08/14 17:55	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m <sup>3</sup>			12/08/14 17:55	1
Trichloroethene	1.4		1.1	0.19	ug/m <sup>3</sup>			12/08/14 17:55	1
Trichlorofluoromethane	2.2		1.1	0.13	ug/m <sup>3</sup>			12/08/14 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.46	J	1.5	0.24	ug/m <sup>3</sup>			12/08/14 17:55	1
1,2,4-Trimethylbenzene	3.2		0.98	0.31	ug/m <sup>3</sup>			12/08/14 17:55	1
1,3,5-Trimethylbenzene	0.77	J	0.98	0.32	ug/m <sup>3</sup>			12/08/14 17:55	1
Vinyl chloride	<0.18		0.51	0.18	ug/m <sup>3</sup>			12/08/14 17:55	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.96		0.20	0.056	ppb v/v			12/08/14 17:55	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 17:55	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 17:55	1
Carbon tetrachloride	0.039	J	0.20	0.038	ppb v/v			12/08/14 17:55	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 17:55	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 17:55	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 17:55	1
Chloromethane	<0.16		0.50	0.16	ppb v/v			12/08/14 17:55	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 17:55	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 17:55	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 17:55	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 17:55	1
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 17:55	1
1,4-Dichlorobenzene	0.16	J	0.20	0.064	ppb v/v			12/08/14 17:55	1
Dichlorodifluoromethane	0.43		0.20	0.068	ppb v/v			12/08/14 17:55	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 17:55	1
1,2-Dichloroethane	0.17	J	0.20	0.047	ppb v/v			12/08/14 17:55	1
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 17:55	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 17:55	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 17:55	1
Ethylbenzene	2.0		0.20	0.068	ppb v/v			12/08/14 17:55	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 17:55	1

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## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

**Client Sample ID:** PP-VP-B-6

**Lab Sample ID:** 500-88892-4

Date Collected: 12/02/14 16:27

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.31	J B	0.50	0.13	ppb v/v			12/08/14 17:55	1
m-Xylene & p-Xylene	3.6		0.20	0.12	ppb v/v			12/08/14 17:55	1
o-Xylene	1.1		0.20	0.061	ppb v/v			12/08/14 17:55	1
Styrene	0.13	J	0.20	0.058	ppb v/v			12/08/14 17:55	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 17:55	1
Tetrachloroethene	0.35		0.20	0.040	ppb v/v			12/08/14 17:55	1
Toluene	7.5		0.20	0.12	ppb v/v			12/08/14 17:55	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 17:55	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 17:55	1
1,1,1-Trichloroethane	1.1		0.20	0.030	ppb v/v			12/08/14 17:55	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 17:55	1
Trichloroethene	0.26		0.20	0.036	ppb v/v			12/08/14 17:55	1
Trichlorofluoromethane	0.39		0.20	0.024	ppb v/v			12/08/14 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.060	J	0.20	0.031	ppb v/v			12/08/14 17:55	1
ne									
1,2,4-Trimethylbenzene	0.65		0.20	0.063	ppb v/v			12/08/14 17:55	1
1,3,5-Trimethylbenzene	0.16	J	0.20	0.065	ppb v/v			12/08/14 17:55	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 17:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	93		60 - 140					12/08/14 17:55	1

**Client Sample ID:** PP-VP-EB

**Lab Sample ID:** 500-88892-5

Date Collected: 12/02/14 15:30

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.5		0.64	0.18	ug/m3			12/08/14 18:50	1
Benzyl chloride	<0.40		2.1	0.40	ug/m3			12/08/14 18:50	1
Bromomethane	<0.12		0.78	0.12	ug/m3			12/08/14 18:50	1
Carbon tetrachloride	0.56	J	1.3	0.24	ug/m3			12/08/14 18:50	1
Chlorobenzene	<0.23		0.92	0.23	ug/m3			12/08/14 18:50	1
Chloroethane	<0.092		0.53	0.092	ug/m3			12/08/14 18:50	1
Chloroform	<0.19		0.98	0.19	ug/m3			12/08/14 18:50	1
Chloromethane	1.0		1.0	0.33	ug/m3			12/08/14 18:50	1
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m3			12/08/14 18:50	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m3			12/08/14 18:50	1
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m3			12/08/14 18:50	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m3			12/08/14 18:50	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m3			12/08/14 18:50	1
1,4-Dichlorobenzene	0.65	J	1.2	0.38	ug/m3			12/08/14 18:50	1
Dichlorodifluoromethane	2.1		0.99	0.34	ug/m3			12/08/14 18:50	1
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m3			12/08/14 18:50	1
1,2-Dichloroethane	0.62	J	0.81	0.19	ug/m3			12/08/14 18:50	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m3			12/08/14 18:50	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m3			12/08/14 18:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m3			12/08/14 18:50	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Client Sample ID: PP-VP-EB****Lab Sample ID: 500-88892-5**

Date Collected: 12/02/14 16:30

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	6.8		0.87	0.30	ug/m <sup>3</sup>			12/08/14 18:50	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m <sup>3</sup>			12/08/14 18:50	1
Methylene Chloride	1.3	J B	1.7	0.45	ug/m <sup>3</sup>			12/08/14 18:50	1
m-Xylene & p-Xylene	13		0.87	0.52	ug/m <sup>3</sup>			12/08/14 18:50	1
o-Xylene	3.7		0.87	0.26	ug/m <sup>3</sup>			12/08/14 18:50	1
Styrene	0.46	J	0.85	0.25	ug/m <sup>3</sup>			12/08/14 18:50	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m <sup>3</sup>			12/08/14 18:50	1
Tetrachloroethene	<0.27		1.4	0.27	ug/m <sup>3</sup>			12/08/14 18:50	1
Toluene	21		0.75	0.45	ug/m <sup>3</sup>			12/08/14 18:50	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m <sup>3</sup>			12/08/14 18:50	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m <sup>3</sup>			12/08/14 18:50	1
1,1,1-Trichloroethane	<0.16		1.1	0.16	ug/m <sup>3</sup>			12/08/14 18:50	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m <sup>3</sup>			12/08/14 18:50	1
Trichloroethene	0.95	J	1.1	0.19	ug/m <sup>3</sup>			12/08/14 18:50	1
Trichlorofluoromethane	1.2		1.1	0.13	ug/m <sup>3</sup>			12/08/14 18:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.54	J	1.5	0.24	ug/m <sup>3</sup>			12/08/14 18:50	1
1,2,4-Trimethylbenzene	2.7		0.98	0.31	ug/m <sup>3</sup>			12/08/14 18:50	1
1,3,5-Trimethylbenzene	0.72	J	0.98	0.32	ug/m <sup>3</sup>			12/08/14 18:50	1
Vinyl chloride	<0.18		0.51	0.18	ug/m <sup>3</sup>			12/08/14 18:50	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.47		0.20	0.056	ppb v/v			12/08/14 18:50	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 18:50	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 18:50	1
Carbon tetrachloride	0.089	J	0.20	0.038	ppb v/v			12/08/14 18:50	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 18:50	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 18:50	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 18:50	1
Chloromethane	0.49		0.50	0.16	ppb v/v			12/08/14 18:50	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 18:50	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 18:50	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 18:50	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 18:50	1
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 18:50	1
1,4-Dichlorobenzene	0.11	J	0.20	0.064	ppb v/v			12/08/14 18:50	1
Dichlorodifluoromethane	0.42		0.20	0.068	ppb v/v			12/08/14 18:50	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 18:50	1
1,2-Dichloroethane	0.15	J	0.20	0.047	ppb v/v			12/08/14 18:50	1
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 18:50	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 18:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 18:50	1
Ethylbenzene	1.6		0.20	0.068	ppb v/v			12/08/14 18:50	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 18:50	1
Methylene Chloride	0.38	J B	0.50	0.13	ppb v/v			12/08/14 18:50	1
m-Xylene & p-Xylene	2.9		0.20	0.12	ppb v/v			12/08/14 18:50	1
o-Xylene	0.85		0.20	0.061	ppb v/v			12/08/14 18:50	1
Styrene	0.11	J	0.20	0.058	ppb v/v			12/08/14 18:50	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 18:50	1

TestAmerica Chicago

**Client Sample Results**

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

Client Sample ID: PP-VP-EB

Lab Sample ID: 500-88892-5

Date Collected: 12/02/14 16:30

Matrix: Air

Date Received: 12/04/14 09:40

Sample Container: Summa Canister 6L

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.040		0.20	0.040	ppb v/v			12/08/14 18:50	1
Toluene	5.6		0.20	0.12	ppb v/v			12/08/14 18:50	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 18:50	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 18:50	1
1,1,1-Trichloroethane	<0.030		0.20	0.030	ppb v/v			12/08/14 18:50	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 18:50	1
Trichloroethene	0.18 J		0.20	0.036	ppb v/v			12/08/14 18:50	1
Trichlorofluoromethane	0.21		0.20	0.024	ppb v/v			12/08/14 18:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.071 J		0.20	0.031	ppb v/v			12/08/14 18:50	1
1,2,4-Trimethylbenzene	0.56		0.20	0.063	ppb v/v			12/08/14 18:50	1
1,3,5-Trimethylbenzene	0.15 J		0.20	0.065	ppb v/v			12/08/14 18:50	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 18:50	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		93		60 - 140				12/08/14 18:50	1

TestAmerica Chicago

## Definitions/Glossary

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

### Qualifiers

#### Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

### Air - GC/MS VOA

#### Analysis Batch: 2026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88892-1	PP-VP-B-4	Total/NA	Air	TO-15	
500-88892-2	PP-VP-B-4-FD	Total/NA	Air	TO-15	
500-88892-3	PP-VP-B-5	Total/NA	Air	TO-15	
500-88892-4	PP-VP-B-6	Total/NA	Air	TO-15	
500-88892-5	PP-VP-EB	Total/NA	Air	TO-15	
LCS 140-2026/1002	Lab Control Sample	Total/NA	Air	TO-15	
MB 140-2026/5	Method Blank	Total/NA	Air	TO-15	

## Surrogate Summary

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Method: TO-15 - Volatile Organic Compounds in Ambient Air**

Matrix: Air

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (60-140)									
500-88892-1	PP-VP-B-4	91									
500-88892-2	PP-VP-B-4-FD	93									
500-88892-3	PP-VP-B-5	97									
500-88892-4	PP-VP-B-6	93									
500-88892-5	PP-VP-EB	93									
LCS 140-2026/1002	Lab Control Sample	101									
MB 140-2026/5	Method Blank	84									

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

### Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-2026/5

Matrix: Air

Analysis Batch: 2026

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.18		0.64	0.18	ug/m <sup>3</sup>			12/08/14 14:14	1
Benzyl chloride	<0.40		2.1	0.40	ug/m <sup>3</sup>			12/08/14 14:14	1
Bromomethane	<0.12		0.78	0.12	ug/m <sup>3</sup>			12/08/14 14:14	1
Carbon tetrachloride	<0.24		1.3	0.24	ug/m <sup>3</sup>			12/08/14 14:14	1
Chlorobenzene	<0.23		0.92	0.23	ug/m <sup>3</sup>			12/08/14 14:14	1
Chloroethane	<0.092		0.53	0.092	ug/m <sup>3</sup>			12/08/14 14:14	1
Chloroform	<0.19		0.98	0.19	ug/m <sup>3</sup>			12/08/14 14:14	1
Chloromethane	<0.33		1.0	0.33	ug/m <sup>3</sup>			12/08/14 14:14	1
cis-1,2-Dichloroethene	<0.24		0.79	0.24	ug/m <sup>3</sup>			12/08/14 14:14	1
cis-1,3-Dichloropropene	<0.34		0.91	0.34	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2-Dibromoethane (EDB)	<0.34		1.5	0.34	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2-Dichlorobenzene	<0.42		1.2	0.42	ug/m <sup>3</sup>			12/08/14 14:14	1
1,3-Dichlorobenzene	<0.39		1.2	0.39	ug/m <sup>3</sup>			12/08/14 14:14	1
1,4-Dichlorobenzene	<0.38		1.2	0.38	ug/m <sup>3</sup>			12/08/14 14:14	1
Dichlorodifluoromethane	<0.34		0.99	0.34	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1-Dichloroethane	<0.11		0.81	0.11	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2-Dichloroethane	<0.19		0.81	0.19	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1-Dichloroethene	<0.13		0.79	0.13	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2-Dichloropropane	<0.24		0.92	0.24	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.22		1.4	0.22	ug/m <sup>3</sup>			12/08/14 14:14	1
Ethylbenzene	<0.30		0.87	0.30	ug/m <sup>3</sup>			12/08/14 14:14	1
Hexachlorobutadiene	<0.83		11	0.83	ug/m <sup>3</sup>			12/08/14 14:14	1
Methylene Chloride	0.551 J		1.7	0.45	ug/m <sup>3</sup>			12/08/14 14:14	1
m-Xylene & p-Xylene	<0.52		0.87	0.52	ug/m <sup>3</sup>			12/08/14 14:14	1
o-Xylene	<0.26		0.87	0.26	ug/m <sup>3</sup>			12/08/14 14:14	1
Styrene	<0.25		0.85	0.25	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1,2,2-Tetrachloroethane	<0.42		1.4	0.42	ug/m <sup>3</sup>			12/08/14 14:14	1
Tetrachloroethene	<0.27		1.4	0.27	ug/m <sup>3</sup>			12/08/14 14:14	1
Toluene	<0.45		0.75	0.45	ug/m <sup>3</sup>			12/08/14 14:14	1
trans-1,3-Dichloropropene	<0.22		0.91	0.22	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2,4-Trichlorobenzene	<0.73		7.4	0.73	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1,1-Trichloroethane	<0.16		1.1	0.16	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1,2-Trichloroethane	<0.29		1.1	0.29	ug/m <sup>3</sup>			12/08/14 14:14	1
Trichloroethene	<0.19		1.1	0.19	ug/m <sup>3</sup>			12/08/14 14:14	1
Trichlorofluoromethane	<0.13		1.1	0.13	ug/m <sup>3</sup>			12/08/14 14:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.24		1.5	0.24	ug/m <sup>3</sup>			12/08/14 14:14	1
1,2,4-Trimethylbenzene	<0.31		0.98	0.31	ug/m <sup>3</sup>			12/08/14 14:14	1
1,3,5-Trimethylbenzene	<0.32		0.98	0.32	ug/m <sup>3</sup>			12/08/14 14:14	1
Vinyl chloride	<0.18		0.51	0.18	ug/m <sup>3</sup>			12/08/14 14:14	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.056		0.20	0.056	ppb v/v			12/08/14 14:14	1
Benzyl chloride	<0.078		0.40	0.078	ppb v/v			12/08/14 14:14	1
Bromomethane	<0.032		0.20	0.032	ppb v/v			12/08/14 14:14	1
Carbon tetrachloride	<0.038		0.20	0.038	ppb v/v			12/08/14 14:14	1
Chlorobenzene	<0.049		0.20	0.049	ppb v/v			12/08/14 14:14	1
Chloroethane	<0.035		0.20	0.035	ppb v/v			12/08/14 14:14	1
Chloroform	<0.038		0.20	0.038	ppb v/v			12/08/14 14:14	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-2026/5

Client Sample ID: Method Blank

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 2026

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloromethane	<0.16		0.50	0.16	ppb v/v			12/08/14 14:14	1
cis-1,2-Dichloroethene	<0.060		0.20	0.060	ppb v/v			12/08/14 14:14	1
cis-1,3-Dichloropropene	<0.074		0.20	0.074	ppb v/v			12/08/14 14:14	1
1,2-Dibromoethane (EDB)	<0.044		0.20	0.044	ppb v/v			12/08/14 14:14	1
1,2-Dichlorobenzene	<0.070		0.20	0.070	ppb v/v			12/08/14 14:14	1
1,3-Dichlorobenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 14:14	1
1,4-Dichlorobenzene	<0.064		0.20	0.064	ppb v/v			12/08/14 14:14	1
Dichlorodifluoromethane	<0.068		0.20	0.068	ppb v/v			12/08/14 14:14	1
1,1-Dichloroethane	<0.026		0.20	0.026	ppb v/v			12/08/14 14:14	1
1,2-Dichloroethane	<0.047		0.20	0.047	ppb v/v			12/08/14 14:14	1
1,1-Dichloroethene	<0.034		0.20	0.034	ppb v/v			12/08/14 14:14	1
1,2-Dichloropropane	<0.052		0.20	0.052	ppb v/v			12/08/14 14:14	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	<0.032		0.20	0.032	ppb v/v			12/08/14 14:14	1
Ethylbenzene	<0.068		0.20	0.068	ppb v/v			12/08/14 14:14	1
Hexachlorobutadiene	<0.078		1.0	0.078	ppb v/v			12/08/14 14:14	1
Methylene Chloride	0.159 J		0.50	0.13	ppb v/v			12/08/14 14:14	1
m-Xylene & p-Xylene	<0.12		0.20	0.12	ppb v/v			12/08/14 14:14	1
o-Xylene	<0.061		0.20	0.061	ppb v/v			12/08/14 14:14	1
Styrene	<0.058		0.20	0.058	ppb v/v			12/08/14 14:14	1
1,1,2,2-Tetrachloroethane	<0.061		0.20	0.061	ppb v/v			12/08/14 14:14	1
Tetrachloroethene	<0.040		0.20	0.040	ppb v/v			12/08/14 14:14	1
Toluene	<0.12		0.20	0.12	ppb v/v			12/08/14 14:14	1
trans-1,3-Dichloropropene	<0.048		0.20	0.048	ppb v/v			12/08/14 14:14	1
1,2,4-Trichlorobenzene	<0.098		1.0	0.098	ppb v/v			12/08/14 14:14	1
1,1,1-Trichloroethane	<0.030		0.20	0.030	ppb v/v			12/08/14 14:14	1
1,1,2-Trichloroethane	<0.054		0.20	0.054	ppb v/v			12/08/14 14:14	1
Trichloroethene	<0.036		0.20	0.036	ppb v/v			12/08/14 14:14	1
Trichlorofluoromethane	<0.024		0.20	0.024	ppb v/v			12/08/14 14:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.031		0.20	0.031	ppb v/v			12/08/14 14:14	1
1,2,4-Trimethylbenzene	<0.063		0.20	0.063	ppb v/v			12/08/14 14:14	1
1,3,5-Trimethylbenzene	<0.065		0.20	0.065	ppb v/v			12/08/14 14:14	1
Vinyl chloride	<0.071		0.20	0.071	ppb v/v			12/08/14 14:14	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surf)	84		60 - 140		12/08/14 14:14	1

Lab Sample ID: LCS 140-2026/1002

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 2026

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Benzene	6.39	5.15		ug/m3	81	70 - 130	
Benzyl chloride	10.4	11.9		ug/m3	114	70 - 130	
Bromomethane	7.77	8.22		ug/m3	106	70 - 130	
Carbon tetrachloride	12.6	15.5		ug/m3	123	70 - 130	
Chlorobenzene	9.21	8.24		ug/m3	89	70 - 130	
Chloroethane	5.28	5.72		ug/m3	108	70 - 130	
Chloroform	9.77	9.71		ug/m3	99	70 - 130	

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

### Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-2026/1002

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 2026

Analyte	Spike	LCS			D	%Rec	Limits
	Added	Result	Qualifier	Unit			
Chloromethane	4.13	4.26		ug/m3		103	60 - 140
cis-1,2-Dichloroethene	7.93	8.13		ug/m3		102	70 - 130
cis-1,3-Dichloropropene	9.08	7.96		ug/m3		88	70 - 130
1,2-Dibromoethane (EDB)	15.4	13.8		ug/m3		90	70 - 130
1,2-Dichlorobenzene	12.0	12.6		ug/m3		105	70 - 130
1,3-Dichlorobenzene	12.0	12.8		ug/m3		107	70 - 130
1,4-Dichlorobenzene	12.0	13.2		ug/m3		110	70 - 130
Dichlorodifluoromethane	9.90	10.6		ug/m3		108	60 - 140
1,1-Dichloroethane	8.10	7.80		ug/m3		96	70 - 130
1,2-Dichloroethane	8.10	6.96		ug/m3		86	70 - 130
1,1-Dichloroethene	7.93	9.79		ug/m3		123	70 - 130
1,2-Dichloropropane	9.25	7.59		ug/m3		82	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14.0	15.5		ug/m3		111	60 - 140
hane							
Ethylbenzene	8.69	8.83		ug/m3		102	70 - 130
Hexachlorobutadiene	21.3	21.7		ug/m3		102	60 - 140
Methylene Chloride	6.95	7.48		ug/m3		108	70 - 130
m-Xylene & p-Xylene	17.4	17.1		ug/m3		98	70 - 130
o-Xylene	8.69	8.86		ug/m3		102	70 - 130
Styrene	8.52	9.20		ug/m3		108	70 - 130
1,1,2,2-Tetrachloroethane	13.7	14.4		ug/m3		105	70 - 130
Tetrachloroethene	13.6	11.9		ug/m3		88	70 - 130
Toluene	7.54	6.95		ug/m3		92	70 - 130
trans-1,3-Dichloropropene	9.08	8.68		ug/m3		96	70 - 130
1,2,4-Trichlorobenzene	14.9	16.7		ug/m3		112	60 - 140
1,1,1-Trichloroethane	10.9	10.9		ug/m3		100	70 - 130
1,1,2-Trichloroethane	10.9	9.59		ug/m3		88	70 - 130
Trichloroethene	10.8	10.4		ug/m3		97	70 - 130
Trichlorofluoromethane	11.2	12.2		ug/m3		108	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	15.3	17.8		ug/m3		116	70 - 130
ne							
1,2,4-Trimethylbenzene	9.84	11.0		ug/m3		112	70 - 130
1,3,5-Trimethylbenzene	9.84	11.2		ug/m3		114	70 - 130
Vinyl chloride	5.12	5.48		ug/m3		107	70 - 130
Analyte	Spike	LCS			D	%Rec	Limits
	Added	Result	Qualifier	Unit			
Benzene	2.0	1.61		ppb v/v		81	70 - 130
Benzyl chloride	2.0	2.29		ppb v/v		114	70 - 130
Bromomethane	2.0	2.12		ppb v/v		106	70 - 130
Carbon tetrachloride	2.0	2.46		ppb v/v		123	70 - 130
Chlorobenzene	2.0	1.79		ppb v/v		89	70 - 130
Chloroethane	2.0	2.17		ppb v/v		108	70 - 130
Chloroform	2.0	1.99		ppb v/v		99	70 - 130
Chloromethane	2.0	2.06		ppb v/v		103	60 - 140
cis-1,2-Dichloroethene	2.0	2.05		ppb v/v		102	70 - 130
cis-1,3-Dichloropropene	2.0	1.75		ppb v/v		88	70 - 130
1,2-Dibromoethane (EDB)	2.0	1.80		ppb v/v		90	70 - 130
1,2-Dichlorobenzene	2.0	2.09		ppb v/v		105	70 - 130
1,3-Dichlorobenzene	2.0	2.13		ppb v/v		107	70 - 130

TestAmerica Chicago

**QC Sample Results**

Client: SCS Engineers

Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1

SDG: 25212326.00

**Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)****Lab Sample ID: LCS 140-2026/1002****Matrix: Air****Analysis Batch: 2026****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
1,4-Dichlorobenzene	2.0	2.20		ppb v/v		110	70 - 130
Dichlorodifluoromethane	2.0	2.15		ppb v/v		108	60 - 140
1,1-Dichloroethane	2.0	1.93		ppb v/v		96	70 - 130
1,2-Dichloroethane	2.0	1.72		ppb v/v		86	70 - 130
1,1-Dichloroethene	2.0	2.47		ppb v/v		123	70 - 130
1,2-Dichloropropane	2.0	1.64		ppb v/v		82	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.0	2.22		ppb v/v		111	60 - 140
Ethylbenzene	2.0	2.03		ppb v/v		102	70 - 130
Hexachlorobutadiene	2.0	2.03		ppb v/v		102	60 - 140
Methylene Chloride	2.0	2.15		ppb v/v		108	70 - 130
m-Xylene & p-Xylene	4.0	3.93		ppb v/v		98	70 - 130
o-Xylene	2.0	2.04		ppb v/v		102	70 - 130
Styrene	2.0	2.16		ppb v/v		108	70 - 130
1,1,2,2-Tetrachloroethane	2.0	2.09		ppb v/v		105	70 - 130
Tetrachloroethene	2.0	1.76		ppb v/v		88	70 - 130
Toluene	2.0	1.84		ppb v/v		92	70 - 130
trans-1,3-Dichloropropene	2.0	1.91		ppb v/v		96	70 - 130
1,2,4-Trichlorobenzene	2.0	2.25		ppb v/v		112	60 - 140
1,1,1-Trichloroethane	2.0	1.99		ppb v/v		100	70 - 130
1,1,2-Trichloroethane	2.0	1.76		ppb v/v		88	70 - 130
Trichloroethene	2.0	1.94		ppb v/v		97	70 - 130
Trichlorofluoromethane	2.0	2.17		ppb v/v		108	60 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	2.32		ppb v/v		116	70 - 130
1,2,4-Trimethylbenzene	2.0	2.24		ppb v/v		112	70 - 130
1,3,5-Trimethylbenzene	2.0	2.28		ppb v/v		114	70 - 130
Vinyl chloride	2.0	2.15		ppb v/v		107	70 - 130
<b>Surrogate</b>		<b>LCS</b>	<b>LCS</b>				
<b>4-Bromofluorobenzene (Surr)</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			
		101		60 - 140			

TestAmerica Chicago

**Lab Chronicle**

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

Client Sample ID: PP-VP-B-4

Lab Sample ID: 500-88892-1

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	2026	12/08/14 15:10	HMT	TAL KNX

Client Sample ID: PP-VP-B-4-FD

Lab Sample ID: 500-88892-2

Date Collected: 12/02/14 15:10

Matrix: Air

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	2026	12/08/14 16:05	HMT	TAL KNX

Client Sample ID: PP-VP-B-5

Lab Sample ID: 500-88892-3

Date Collected: 12/02/14 16:05

Matrix: Air

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	2026	12/08/14 17:00	HMT	TAL KNX

Client Sample ID: PP-VP-B-6

Lab Sample ID: 500-88892-4

Date Collected: 12/02/14 16:27

Matrix: Air

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	2026	12/08/14 17:55	HMT	TAL KNX

Client Sample ID: PP-VP-EB

Lab Sample ID: 500-88892-5

Date Collected: 12/02/14 15:30

Matrix: Air

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	2026	12/08/14 18:50	HMT	TAL KNX

**Laboratory References:**

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

TestAmerica Chicago

## Certification Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield - Pankratz Property

TestAmerica Job ID: 500-88892-1  
 SDG: 25212326.00

### Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15 *

### Laboratory: TestAmerica Knoxville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998044300	08-31-15

\* Certification renewal pending - certification considered valid.

TestAmerica Chicago

## TAL Knoxville

5815 Middlebrook Pike  
Knoxville, TN 37921  
phone 865-291-3000 fax 865-584-4315

## Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

508-88892

Client Contact Information		Project Manager: ERIC OELKERS		Sampled By: TYLER MUNSON		1 of 1 COCs													
Company: SCS ENGINEERS Address: 2830 DAIRY DR. City/State/Zip: MADISON WI, 53718 Phone: 608 224 2830 FAX: 608 224 2839		Phone: 608 224 2830 Site Contact: ERIC OELKERS TAL Contact:																	
Project Name: MADISON BROWNFIELDS Site/location: PANKRATZ PROPERTY PO #		Analysis Turnaround Time Standard (Specify) X 10-DAY Rush (Specify)		500-88892 COC															
Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)	Canister Vacuum in Field, 'Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas (SUS - SLAB)	Landfill Gas	Other (Please specify in notes section)
PP-VP-B-4	12-2-14	1440	1510	-29	-6	10087	09828									✓			
PP-VP-B-4-FD		1440	1510	-29.5	-6	09899	11046									✓			
PP-VP-B-5		1535	1605	-29.5	-4	09898	09537									✓			
PP-VP-B-6		1557	1627	-30	-6	11112	10278									✓			
PP-VP-EB	▼	1500	1530	-29.5	-7	10614	09523												X
Sampled by:	Temperature (Fahrenheit)								PID READINGS: PP-VP-B-4 = 2,600 ppb PP-VP-B-4-FD = 2,600 ppb PP-VP-B-5 = 14.38 ppm										
TYLER MUNSON		Interior	Ambient																
	Start	32	20																
	Stop	32	20																
	Pressure (inches of Hg)								PP-VP-B-6 = 2,614 ppb PP-VP-EB = 1,794 ppb										
	Interior	Ambient																	
	Start																		
	Stop																		
Special Instructions/QC Requirements & Comments:  PP-VP-EB IS EQUIPMENT BLANK WITH OUTDOOR AIR AS SUPPLY.																			

Canisters Shipped by:  TYLER MUNSON	Date/Time:  12/2/14 - 1340	Canisters Received by:  TYLER MUNSON 12/2/14
Samples Relinquished by:  TYLER MUNSON	Date/Time:  12/3/14 - 1340	Received by:  TYLER MUNSON 12/4/14 0940
Relinquished by:  TYLER MUNSON	Date/Time:  12/4/14 1530	Received by:

### **Chain of Custody Record**



TAL Knoxville  
5815 Middlebrook Pike  
Knoxville, TN 37921  
phone 865-291-3000 fax 865-584-4315

## Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING  
*500-888-9992*

Client Contact Information		Project Manager: Eric Deters		Sampled By: Tyler Munson		1 of 1 cocs																																																	
Company: SCS Engineers	Phone: 609 324 2830	Site Contact: Eric O'Connell	TAL Contact:																																																				
Address: 28220 Daney Dr.																																																							
City/State/Zip: Madison WI, 53718																																																							
Phone: 608 324 2830																																																							
FAX: 608 324 2839																																																							
Project Name: NTSO:Son Brownfields																																																							
Site/Location: Daneant Property																																																							
PO #																																																							
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<i>J. L. Jones</i>		<i>12/11/14</i>	<i>Tyler Munson</i>		<i>12/11/14</i>																																																		
Samples Relinquished by:		Date/Time:	Received by:																																																				
<i>Tyler Munson</i>		<i>12/11/14</i>	<i>John Mathis</i>		<i>12/14/14 0940</i>																																																		
Relinquished by:		Date/Time:	Received by:																																																				
<i>John Mathis</i>		<i>12/11/14</i>	<i>John Mathis</i>		<i>12/14/14 0950</i>																																																		

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-88892-1  
SDG Number: 25212326.00

Login Number: 88892

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-88892-1  
SDG Number: 25212326.00

Login Number: 88892

List Source: TestAmerica Knoxville  
List Creation: 12/05/14 03:42 PM

List Number: 2

Creator: Wilson, Ken

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	N/A	This is checked in the lab.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G1

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-2340-1

SDG No.:

Client Sample ID: 09542

Lab Sample ID: 140-2340-6

Matrix: Air

Lab File ID: 140-2340-a-6.D

Analysis Method: TO 15 LL

Date Collected: 11/20/2014 07:30

Sample wt/vol: 500 (mL)

Date Analyzed: 11/22/2014 13:51

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 1956

Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
74-83-9	Bromomethane	ND		0.080	
56-23-5	Carbon tetrachloride	ND		0.040	
108-90-7	Chlorobenzene	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
67-66-3	Chloroform	ND		0.080	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
74-87-3	Chloromethane	ND		0.20	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
75-71-8	Dichlorodifluoromethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.080	
156-59-2	cis-1,2-Dichloroethene	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
78-93-3	2-Butanone	ND		0.32	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
95-49-8	2-Chlorotoluene	ND		0.16	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
591-78-6	2-Hexanone	ND		0.20	
107-05-1	3-Chloroprene	ND		0.080	
100-41-4	Ethylbenzene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
75-69-4	Trichlorofluoromethane	ND		0.080	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	
87-68-3	Hexachlorobutadiene	ND		0.080	
67-64-1	Acetone	ND		2.0	
75-09-2	Methylene Chloride	ND		0.20	
75-05-8	Acetonitrile	ND		0.40	
100-42-5	Styrene	ND		0.080	

FORM I TO 15 LL

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-2340-1

SDG No.:

Client Sample ID: 09542

Lab Sample ID: 140-2340-6

Matrix: Air

Lab File ID: 140-2340-a-6.D

Analysis Method: TO 15 LL

Date Collected: 11/20/2014 07:30

Sample wt/vol: 500 (mL)

Date Analyzed: 11/22/2014 13:51

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 1956

Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
107-02-8	Acrolein	ND		0.16	
107-13-1	Acrylonitrile	ND		0.80	
127-18-4	Tetrachloroethene	ND		0.040	
98-83-9	Alpha Methyl Styrene	ND		0.16	
108-88-3	Toluene	ND		0.12	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
75-27-4	Bromodichloromethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
79-01-6	Trichloroethene	0.071		0.040	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
106-97-8	Butane	ND		0.16	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
75-15-0	Carbon disulfide	ND		0.20	
75-01-4	Vinyl chloride	ND		0.040	
95-47-6	o-Xylene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
106-93-4	1,2-Dibromoethane	ND		0.080	
110-82-7	Cyclohexane	ND		0.20	
124-18-5	n-Decane	ND		0.40	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
112-40-3	n-Dodecane	ND		0.40	
64-17-5	Ethanol	ND		0.80	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
142-82-5	n-Heptane	ND		0.20	
110-54-3	Hexane	ND		0.20	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	
91-20-3	Naphthalene	ND		0.20	

FORM I TO 15 LL

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-2340-1

SDG No.:

Client Sample ID: 09542

Lab Sample ID: 140-2340-6

Matrix: Air

Lab File ID: 140-2340-a-6.D

Analysis Method: TO 15 LL

Date Collected: 11/20/2014 07:30

Sample wt/vol: 500 (mL)

Date Analyzed: 11/22/2014 13:51

Soil Aliquot Vol.:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 1956

Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
104-51-8	n-Butylbenzene	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
111-65-9	n-Octane	ND		0.16	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		0.20	
135-98-8	sec-Butylbenzene	ND		0.16	
98-06-6	tert-Butylbenzene	ND		0.20	
109-99-9	Tetrahydrofuran	ND		0.40	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
488-23-3	1,2,3,4-Tetramethylbenzene	ND		0.080	
527-53-7	1,2,3,5-Tetramethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
934-80-5	1,2-Dimethyl-4-Ethylbenzene	ND		0.080	
90-12-0	1-Methylnaphthalene	ND		1.0	
3074-71-3	2,3-Dimethylheptane	ND		0.080	
872-55-9	2-Ethylthiophene	ND		0.080	
554-14-3	2-Methylthiophene	ND		0.080	
91-57-6	2-Methylnaphthalene	ND		1.0	
616-44-4	3-Methylthiophene	ND		0.080	
95-15-8	Benzo(b)thiophene	ND		0.16	
110-02-1	Thiophene	ND		0.080	
1678-93-9	Butylcyclohexane	ND		0.080	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadine	ND		0.16	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-78-4	2-Methylbutane	ND		0.20	
107-83-5	2-Methylpentane	ND		0.080	
75-07-0	Acetaldehyde	ND		4.0	
98-82-8	Cumene	ND		0.16	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	

FORM I TO 15 LL

FORM I  
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Knoxville

Job No.: 140-2340-1

SDG No.:

Client Sample ID: 09542

Lab Sample ID: 140-2340-6

Matrix: Air

Lab File ID: 140-2340-a-6.D

Analysis Method: TO 15 LL

Date Collected: 11/20/2014 07:30

Sample wt/vol: 500 (mL)

Date Analyzed: 11/22/2014 13:51

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: RTX-5 ID: 0.32 (mm)

% Moisture:

Level: (low/med) Low

Analysis Batch No.: 1956

Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
99-87-6	p-Cymene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
108-87-2	Methylcyclohexane	ND		0.080	
111-84-2	n-Nonane	ND		0.20	

Report Date: 24-Nov-2014 09:10:01

Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Knoxville  
Target Compound Quantitation Report

Data File: \\KNXCHROM\ChromData\MG\20141121-1120.b\140-2340-a-6.D  
 Lims ID: 140-2340-A-6 Lab Sample ID: 140-2340-6  
 Client ID: 09542  
 Sample Type: Client  
 Inject. Date: 22-Nov-2014 13:51:30 ALS Bottle#: 16 Worklist Smp#: 4  
 Purge Vol: 500.000 mL Dil. Factor: 1.0000  
 Sample Info: 09542  
 Misc. Info.: G112214,TO15,140-0001120-004  
 Operator ID: 403648 Instrument ID: MG  
 Method: \\KNXCHROM\ChromData\MG\20141121-1120.b\MG\_TO15.m  
 Limit Group: MSA TO14A\_15 Routine ICAL  
 Last Update: 24-Nov-2014 09:09:48 Calib Date: 12-Nov-2014 01:33:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\KNXCHROM\ChromData\MG\20141111-1096.b\GK11IC09.D  
 Column 1: RTX-5 ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: barlozhetskaya Date: 22-Nov-2014 14:31:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.166	9.161	0.005	72	219330	4.00	
* 2 1,4-Difluorobenzene	114	11.318	11.312	0.006	94	1062188	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.987	15.987	0.000	87	1012277	4.00	
\$ 4 4-Bromofluorobenzene (Surr)	95	17.616	17.616	0.000	93	741733	3.96	
21 Acrolein	56	5.542	5.516	0.026	68	1793	0.1418	
25 Isopropyl alcohol	45	5.801	5.742	0.059	53	1924	0.0419	
31 Methylene Chloride	84	6.594	6.583	0.011	90	3153	0.0652	
42 cis-1,2-Dichloroethene	96	8.821	8.826	-0.005	88	2201	0.0346	
49 n-Butanol	31	10.805	10.746	0.059	67	2159	0.1543	
59 Trichloroethene	130	12.019	12.013	0.006	96	7566	0.0712	
62 1,4-Dioxane	88	12.304	12.256	0.048	38	917	0.0351	
65 4-Methyl-2-pentanone (MIBK)	43	13.178	13.162	0.016	95	15423	0.1881	

**Reagents:**

MAissur1\_00002 Amount Added: 40.00 Units: mL Run Reagent

Report Date: 24-Nov-2014 09:10:01

Chrom Revision: 2.2 06-Nov-2014 14:50:32

Data File: \\KNXCHROM\ChromData\MG\20141121-1120.b\140-2340-a-6.D

Injection Date: 22-Nov-2014 13:51:30

Instrument ID: MG

Operator ID: 403648

Lims ID: 140-2340-A-6

Lab Sample ID: 140-2340-6

Worklist Smp#: 4

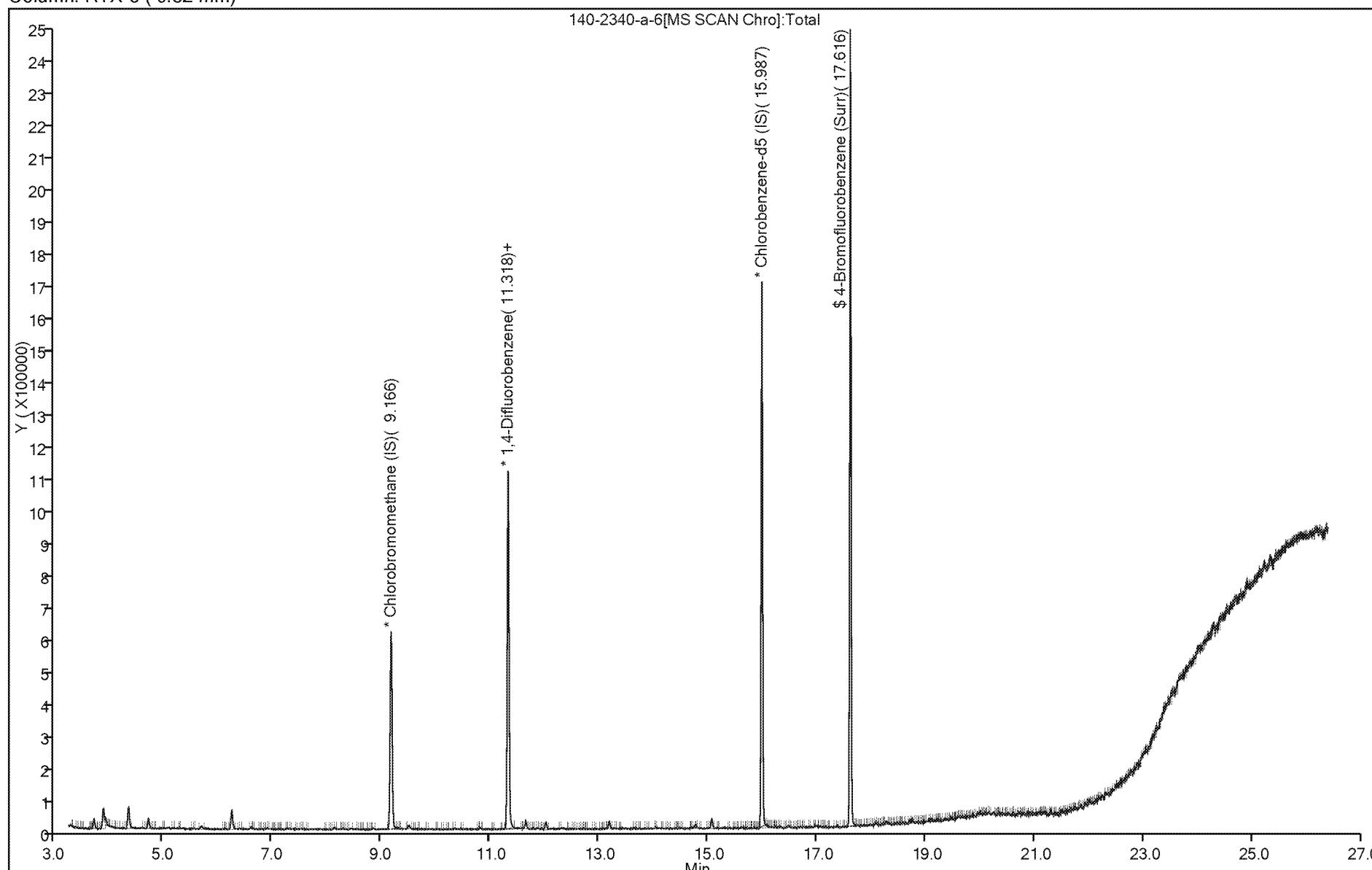
Client ID: 09542

Dil. Factor: 1.0000

ALS Bottle#: 16

Purge Vol: 500.000 mL

Limit Group: MSA TO14A\_15 Routine ICAL

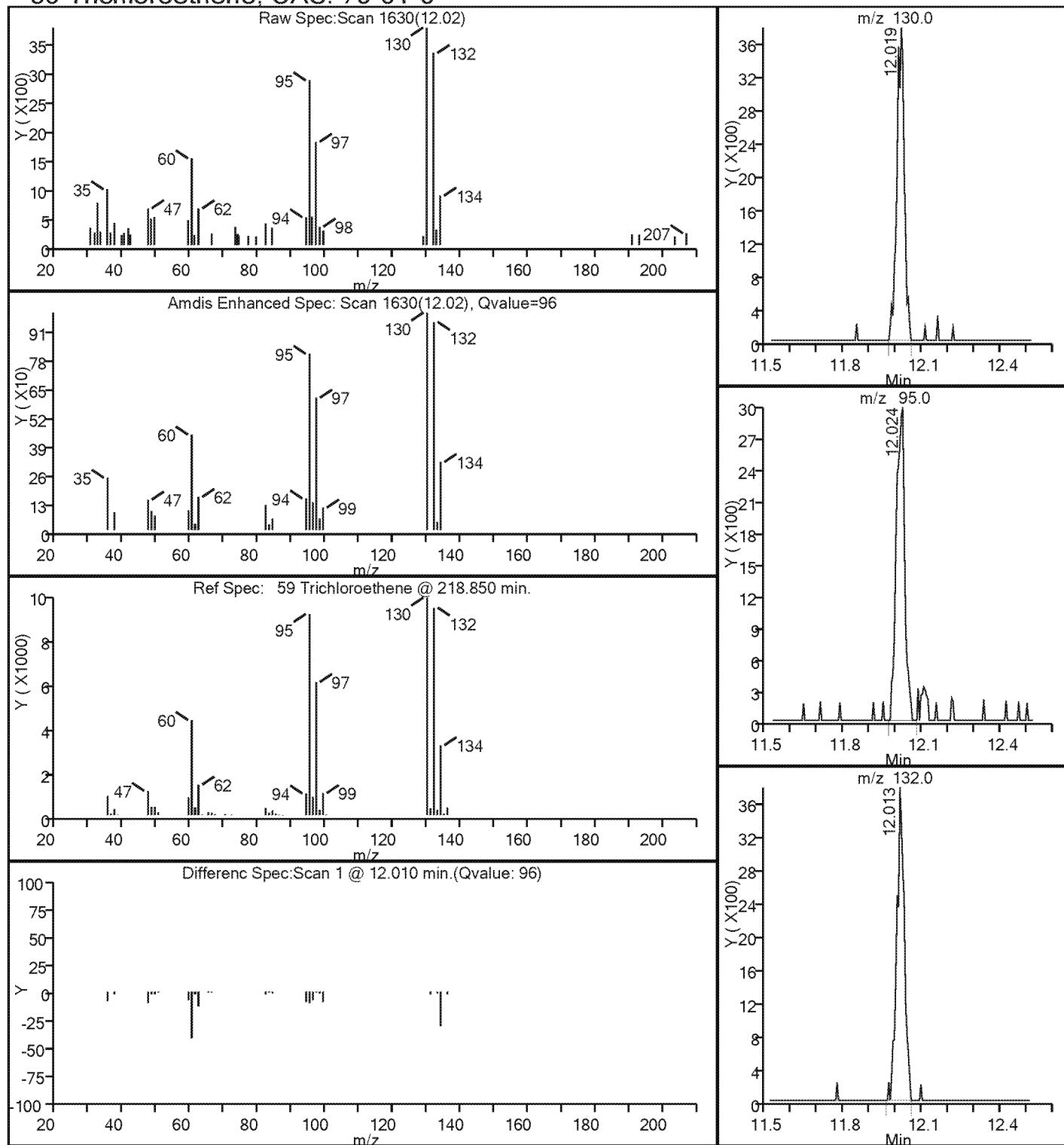
Method: MG\_TO15  
Column: RTX-5 ( 0.32 mm)

Report Date: 24-Nov-2014 09:10:01

Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Knoxville  
 Data File: \\KNXCHROM\ChromData\MG\20141121-1120.b\140-2340-a-6.D  
 Injection Date: 22-Nov-2014 13:51:30 Instrument ID: MG  
 Lims ID: 140-2340-A-6 Lab Sample ID: 140-2340-6  
 Client ID: 09542  
 Operator ID: 403648 ALS Bottle#: 16 Worklist Smp#: 4  
 Purge Vol: 500.000 mL Dil. Factor: 1.0000  
 Method: MG\_TO15 Limit Group: MSA TO14A\_15 Routine ICAL  
 Column: RTX-5 ( 0.32 mm) Detector: MS SCAN

## 59 Trichloroethene, CAS: 79-01-6



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-88912-1

TestAmerica Sample Delivery Group: 25212326.00

Client Project/Site: Madison Brownfield Pankratz Property

For:

SCS Engineers

2830 Dairy Dr

Madison, Wisconsin 53718

Attn: Mr. Eric Oelkers



Authorized for release by:

12/11/2014 2:31:41 PM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

### LINKS

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results through

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[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

---

**Job ID:** 500-88912-1

**Laboratory:** TestAmerica Chicago

**Narrative**

**Job Narrative**  
**500-88912-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 12/4/2014 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

**GC/MS VOA**

Method(s) 8260B: The laboratory control sample (LCS) for the preparation batch 267175 recovered outside acceptance limits for Chloromethane, Dichlorodifluoromethane and Vinyl Chloride. There was insufficient sample to perform a re-analysis. The associated analytical batch LCS standard had all compounds within the acceptance limits; therefore, the data have been reported

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC/MS Semi VOA**

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: PP-SB-GP-3, 1-2' (500-88912-4), PP-SB-GP-4, 4-8' (500-88912-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**

Method(s) 6010B: The following samples 500-88912-3 and 4 was diluted due to the abundance of non-target analytes. Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Detection Summary**

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Client Sample ID: PP-SB-GP-1, 3-4'****Lab Sample ID: 500-88912-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	34	J	39	5.3	ug/Kg	1	•	8270D	Total/NA
Benzo[a]pyrene	22	J	39	7.6	ug/Kg	1	•	8270D	Total/NA
Benzo[b]fluoranthene	34	J	39	8.5	ug/Kg	1	•	8270D	Total/NA
Benzo[g,h,i]perylene	18	J	39	13	ug/Kg	1	•	8270D	Total/NA
Benzo[k]fluoranthene	23	J	39	12	ug/Kg	1	•	8270D	Total/NA
Chrysene	36	J	39	11	ug/Kg	1	•	8270D	Total/NA
Dibenz(a,h)anthracene	8.8	J	39	7.6	ug/Kg	1	•	8270D	Total/NA
Fluoranthene	55		39	7.3	ug/Kg	1	•	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	19	J	39	10	ug/Kg	1	•	8270D	Total/NA
Phenanthrene	26	J	39	5.5	ug/Kg	1	•	8270D	Total/NA
Pyrene	51		39	7.8	ug/Kg	1	•	8270D	Total/NA
Arsenic	7.9		1.2	0.24	mg/Kg	1	•	6010B	Total/NA
Barium	140		1.2	0.13	mg/Kg	1	•	6010B	Total/NA
Cadmium	0.91		0.24	0.030	mg/Kg	1	•	6010B	Total/NA
Chromium	17		1.2	0.14	mg/Kg	1	•	6010B	Total/NA
Lead	70		0.60	0.18	mg/Kg	1	•	6010B	Total/NA
Mercury	0.12		0.020	0.0077	mg/Kg	1	•	7471A	Total/NA

**Client Sample ID: PP-SB-GP-1, 3-4' FD****Lab Sample ID: 500-88912-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	9.4	J	41	7.7	ug/Kg	1	•	8270D	Total/NA
Pyrene	11	J	41	8.3	ug/Kg	1	•	8270D	Total/NA
Arsenic	7.4		1.2	0.24	mg/Kg	1	•	6010B	Total/NA
Barium	140		1.2	0.13	mg/Kg	1	•	6010B	Total/NA
Cadmium	1.2		0.24	0.030	mg/Kg	1	•	6010B	Total/NA
Chromium	16		1.2	0.14	mg/Kg	1	•	6010B	Total/NA
Lead	110		0.59	0.18	mg/Kg	1	•	6010B	Total/NA
Mercury	0.13		0.019	0.0073	mg/Kg	1	•	7471A	Total/NA

**Client Sample ID: PP-SB-GP-2, 1-2'****Lab Sample ID: 500-88912-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	59		34	4.7	ug/Kg	50	•	8260B	Total/NA
1-Methylnaphthalene	340		39	9.5	ug/Kg	1	•	8270D	Total/NA
2-Methylnaphthalene	370		39	7.1	ug/Kg	1	•	8270D	Total/NA
Acenaphthene	50		39	7.0	ug/Kg	1	•	8270D	Total/NA
Anthracene	86		39	6.5	ug/Kg	1	•	8270D	Total/NA
Benzo[a]anthracene	360		39	5.2	ug/Kg	1	•	8270D	Total/NA
Benzo[a]pyrene	240		39	7.5	ug/Kg	1	•	8270D	Total/NA
Benzo[b]fluoranthene	380		39	8.4	ug/Kg	1	•	8270D	Total/NA
Benzo[g,h,i]perylene	200		39	13	ug/Kg	1	•	8270D	Total/NA
Benzo[k]fluoranthene	160		39	11	ug/Kg	1	•	8270D	Total/NA
Chrysene	380		39	11	ug/Kg	1	•	8270D	Total/NA
Dibenz(a,h)anthracene	60		39	7.5	ug/Kg	1	•	8270D	Total/NA
Fluoranthene	800		39	7.2	ug/Kg	1	•	8270D	Total/NA
Fluorene	34	J	39	5.5	ug/Kg	1	•	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	150		39	10	ug/Kg	1	•	8270D	Total/NA
Naphthalene	150		39	6.0	ug/Kg	1	•	8270D	Total/NA
Phenanthrene	750		39	5.4	ug/Kg	1	•	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Detection Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-2, 1-2' (Continued)

Lab Sample ID: 500-88912-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	570		39	7.7	ug/Kg	1	●	8270D	Total/NA
Arsenic	9.5		1.1	0.22	mg/Kg	1	●	6010B	Total/NA
Barium	50		1.1	0.12	mg/Kg	1	●	6010B	Total/NA
Cadmium	7.3		0.22	0.029	mg/Kg	1	●	6010B	Total/NA
Chromium	11		1.1	0.13	mg/Kg	1	●	6010B	Total/NA
Lead	1900		2.8	0.84	mg/Kg	5	●	6010B	Total/NA
Selenium	1.2		1.1	0.40	mg/Kg	1	●	6010B	Total/NA
Silver	0.98		0.56	0.041	mg/Kg	1	●	6010B	Total/NA
Mercury	0.083		0.019	0.0073	mg/Kg	1	●	7471A	Total/NA

Client Sample ID: PP-SB-GP-3, 1-2'

Lab Sample ID: 500-88912-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	25		17	7.9	ug/Kg	50	●	8260B	Total/NA
Xylenes, Total	83		34	4.7	ug/Kg	50	●	8260B	Total/NA
1-Methylnaphthalene	160 J		180	43	ug/Kg	5	●	8270D	Total/NA
2-Methylnaphthalene	230		180	33	ug/Kg	5	●	8270D	Total/NA
Acenaphthylene	41 J		180	23	ug/Kg	5	●	8270D	Total/NA
Anthracene	53 J		180	30	ug/Kg	5	●	8270D	Total/NA
Benzo[a]anthracene	410		180	24	ug/Kg	5	●	8270D	Total/NA
Benzo[a]pyrene	270		180	34	ug/Kg	5	●	8270D	Total/NA
Benzo[b]fluoranthene	580		180	38	ug/Kg	5	●	8270D	Total/NA
Benzo[g,h,i]perylene	220		180	57	ug/Kg	5	●	8270D	Total/NA
Benzo[k]fluoranthene	200		180	52	ug/Kg	5	●	8270D	Total/NA
Chrysene	460		180	48	ug/Kg	5	●	8270D	Total/NA
Dibenz(a,h)anthracene	84 J		180	34	ug/Kg	5	●	8270D	Total/NA
Fluoranthene	760		180	33	ug/Kg	5	●	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	200		180	46	ug/Kg	5	●	8270D	Total/NA
Naphthalene	94 J		180	27	ug/Kg	5	●	8270D	Total/NA
Phenanthrene	630		180	25	ug/Kg	5	●	8270D	Total/NA
Pyrene	670		180	35	ug/Kg	5	●	8270D	Total/NA
Arsenic	14		1.0	0.20	mg/Kg	1	●	6010B	Total/NA
Barium	63		1.0	0.11	mg/Kg	1	●	6010B	Total/NA
Cadmium	1.3		0.20	0.026	mg/Kg	1	●	6010B	Total/NA
Chromium	15		1.0	0.12	mg/Kg	1	●	6010B	Total/NA
Lead	550		2.5	0.75	mg/Kg	5	●	6010B	Total/NA
Selenium	1.1		1.0	0.36	mg/Kg	1	●	6010B	Total/NA
Silver	0.56		0.50	0.036	mg/Kg	1	●	6010B	Total/NA
Mercury	0.061		0.017	0.0066	mg/Kg	1	●	7471A	Total/NA

Client Sample ID: PP-SB-GP-4, 4-8'

Lab Sample ID: 500-88912-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	190		130	14	ug/Kg	50	●	8260B	Total/NA
1,3,5-Trimethylbenzene	60 J		130	14	ug/Kg	50	●	8260B	Total/NA
Isopropylbenzene	37 J		130	17	ug/Kg	50	●	8260B	Total/NA
Naphthalene	740		130	33	ug/Kg	50	●	8260B	Total/NA
n-Butylbenzene	130		67	8.7	ug/Kg	50	●	8260B	Total/NA
N-Propylbenzene	62 J		130	12	ug/Kg	50	●	8260B	Total/NA
p-Isopropyltoluene	100 J		130	12	ug/Kg	50	●	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Client Sample ID: PP-SB-GP-4, 4-8' (Continued)****Lab Sample ID: 500-88912-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
sec-Butylbenzene	170		67	10	ug/Kg	50	•	8260B	Total/NA
Xylenes, Total	63		34	4.6	ug/Kg	50	•	8260B	Total/NA
1-Methylnaphthalene	3200		370	92	ug/Kg	10	•	8270D	Total/NA
2-Methylnaphthalene	4900		370	69	ug/Kg	10	•	8270D	Total/NA
Anthracene	250 J		370	63	ug/Kg	10	•	8270D	Total/NA
Benzo[a]anthracene	770		370	51	ug/Kg	10	•	8270D	Total/NA
Benzo[a]pyrene	420		370	73	ug/Kg	10	•	8270D	Total/NA
Benzo[b]fluoranthene	900		370	81	ug/Kg	10	•	8270D	Total/NA
Benzo[g,h,i]perylene	440		370	120	ug/Kg	10	•	8270D	Total/NA
Benzo[k]fluoranthene	340 J		370	110	ug/Kg	10	•	8270D	Total/NA
Chrysene	870		370	100	ug/Kg	10	•	8270D	Total/NA
Fluoranthene	1700		370	70	ug/Kg	10	•	8270D	Total/NA
Fluorene	560		370	53	ug/Kg	10	•	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	370		370	97	ug/Kg	10	•	8270D	Total/NA
Naphthalene	1100		370	58	ug/Kg	10	•	8270D	Total/NA
Phenanthrene	5000		370	52	ug/Kg	10	•	8270D	Total/NA
Pyrene	4300		370	75	ug/Kg	10	•	8270D	Total/NA
Arsenic	1.6		1.1	0.22	mg/Kg	1	•	6010B	Total/NA
Barium	61		1.1	0.12	mg/Kg	1	•	6010B	Total/NA
Cadmium	0.99		0.22	0.028	mg/Kg	1	•	6010B	Total/NA
Chromium	5.8		1.1	0.13	mg/Kg	1	•	6010B	Total/NA
Lead	130		0.56	0.17	mg/Kg	1	•	6010B	Total/NA
Mercury	0.078		0.019	0.0074	mg/Kg	1	•	7471A	Total/NA

**Client Sample ID: PP-SB-GP-4, 8-10'****Lab Sample ID: 500-88912-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	33 J		130	14	ug/Kg	50	•	8260B	Total/NA
Naphthalene	130		130	33	ug/Kg	50	•	8260B	Total/NA
N-Propylbenzene	13 J		130	12	ug/Kg	50	•	8260B	Total/NA
1-Methylnaphthalene	19 J		37	9.1	ug/Kg	1	•	8270D	Total/NA
2-Methylnaphthalene	25 J		37	6.9	ug/Kg	1	•	8270D	Total/NA
Naphthalene	15 J		37	5.8	ug/Kg	1	•	8270D	Total/NA
Phenanthrene	18 J		37	5.2	ug/Kg	1	•	8270D	Total/NA
Pyrene	7.7 J		37	7.4	ug/Kg	1	•	8270D	Total/NA
Arsenic	4.4		1.1	0.21	mg/Kg	1	•	6010B	Total/NA
Barium	75 V		1.1	0.11	mg/Kg	1	•	6010B	Total/NA
Cadmium	0.17 J		0.21	0.027	mg/Kg	1	•	6010B	Total/NA
Chromium	14 V		1.1	0.12	mg/Kg	1	•	6010B	Total/NA
Lead	15		0.53	0.16	mg/Kg	1	•	6010B	Total/NA
Selenium	0.38 J		1.1	0.38	mg/Kg	1	•	6010B	Total/NA
Mercury	0.019		0.019	0.0074	mg/Kg	1	•	7471A	Total/NA

**Client Sample ID: PP-SB-TB****Lab Sample ID: 500-88912-7** No Detections.**Client Sample ID: PP-SB-EB****Lab Sample ID: 500-88912-8**

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

**Detection Summary**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-SB-EB (Continued)

Lab Sample ID: 500-88912-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	6.2	J B	10	1.1	ug/L	1		6010B	Total Recoverable

Client Sample ID: PP-GW-MW-2

Lab Sample ID: 500-88912-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	130	B	10	1.1	ug/L	1		6010B	Total Recoverable
Cadmium	1.0	J	2.0	0.26	ug/L	1		6010B	Total Recoverable
Chromium	1.3	J	10	1.0	ug/L	1		6010B	Total Recoverable
Lead	3.9	J	5.0	2.3	ug/L	1		6010B	Total Recoverable

Client Sample ID: PP-GW-MW-2-FD

Lab Sample ID: 500-88912-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120	B	10	1.1	ug/L	1		6010B	Total Recoverable
Cadmium	0.81	J	2.0	0.26	ug/L	1		6010B	Total Recoverable

Client Sample ID: PP-GW-MW-3

Lab Sample ID: 500-88912-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.55	J	1.0	0.17	ug/L	1		8260B	Total/NA
Barium	6.4	J B	10	1.1	ug/L	1		6010B	Total Recoverable

Client Sample ID: PP-GW-EB

Lab Sample ID: 500-88912-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	170	B	10	1.1	ug/L	1		6010B	Total Recoverable
Cadmium	1.1	J	2.0	0.26	ug/L	1		6010B	Total Recoverable

Client Sample ID: PP-GW-TB

Lab Sample ID: 500-88912-13

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Method Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CHI
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CHI
6010B	Metals (ICP)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
7471A	Mercury (CVAA)	SW846	TAL CHI
Moisture	Percent Moisture	EPA	TAL CHI

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-88912-1	PP-SB-GP-1, 3-4'	Solid	12/02/14 11:45	12/04/14 09:40
500-88912-2	PP-SB-GP-1, 3-4' FD	Solid	12/02/14 11:45	12/04/14 09:40
500-88912-3	PP-SB-GP-2, 1-2'	Solid	12/02/14 12:25	12/04/14 09:40
500-88912-4	PP-SB-GP-3, 1-2'	Solid	12/02/14 14:00	12/04/14 09:40
500-88912-5	PP-SB-GP-4, 4-8'	Solid	12/02/14 15:45	12/04/14 09:40
500-88912-6	PP-SB-GP-4, 8-10'	Solid	12/02/14 15:50	12/04/14 09:40
500-88912-7	PP-SB-TB	Solid	12/02/14 00:00	12/04/14 09:40
500-88912-8	PP-SB-EB	Water	12/03/14 12:30	12/04/14 09:40
500-88912-9	PP-GW-MW-2	Water	12/03/14 10:25	12/04/14 09:40
500-88912-10	PP-GW-MW-2-FD	Water	12/03/14 10:25	12/04/14 09:40
500-88912-11	PP-GW-MW-3	Water	12/03/14 13:15	12/04/14 09:40
500-88912-12	PP-GW-EB	Water	12/03/14 12:45	12/04/14 09:40
500-88912-13	PP-GW-TB	Water	12/03/14 00:00	12/04/14 09:40

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-1, 3-4'

Lab Sample ID: 500-88912-1

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 80.4

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1,1-Trichloroethane	<15		74	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1,2,2-Tetrachloroethane	<17		74	17	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1,2-Trichloroethane	<21		74	21	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1-Dichloroethane	<14		74	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1-Dichloroethene	<23		74	23	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,1-Dichloropropene	<25		74	25	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2,3-Trichlorobenzene	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2,3-Trichloropropane	<42		150	42	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2,4-Trichlorobenzene	<28		150	28	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2,4-Trimethylbenzene	<16		150	16	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2-Dibromo-3-Chloropropane	<64		150	64	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2-Dibromoethane	<23		150	23	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2-Dichlorobenzene	<15		150	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2-Dichloroethane	<21		74	21	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,2-Dichloropropene	<14		74	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,3,5-Trimethylbenzene	<15		150	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,3-Dichlorobenzene	<19		150	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,3-Dichloropropene	<9.9		74	9.9	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
1,4-Dichlorobenzene	<13		150	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
2,2-Dichloropropane	<23		74	23	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
2-Chlorotoluene	<15		74	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
4-Chlorotoluene	<15		74	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Benzene	<5.5		18	5.5	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Bromobenzene	<31		150	31	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Bromochloromethane	<28		150	28	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Bromodichloromethane	<25		150	25	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Bromoform	<33		150	33	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Bromomethane	<50		150	50	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Carbon tetrachloride	<19		74	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Chlorobenzene	<11		74	11	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Chloroethane	<32		150	32	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Chloroform	<15		74	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Chloromethane	<34 *		150	34	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
cis-1,2-Dichloroethene	<9.1		74	9.1	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
cis-1,3-Dichloropropene	<13		74	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Dibromochloromethane	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Dibromomethane	<35		150	35	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Dichlorodifluoromethane	<38 *		150	38	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Ethylbenzene	<9.3		18	9.3	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Hexachlorobutadiene	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Isopropyl ether	<11		150	11	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Isopropylbenzene	<19		150	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Methyl tert-butyl ether	<32		150	32	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Methylene Chloride	<50		370	50	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Naphthalene	<36		150	36	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
n-Butylbenzene	<9.5		74	9.5	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
N-Propylbenzene	<13		150	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
p-Isopropyltoluene	<14		150	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-GP-1, 3-4'

**Lab Sample ID:** 500-88912-1

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 80.4

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<11		74	11	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Styrene	<7.3		74	7.3	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
tert-Butylbenzene	<10		74	10	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Tetrachloroethene	<12		74	12	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Toluene	<8.5		18	8.5	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
trans-1,2-Dichloroethene	<18		74	18	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
trans-1,3-Dichloropropene	<15		74	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Trichloroethene	<14		37	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Trichlorofluoromethane	<31		150	31	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Vinyl chloride	<7.7 *		18	7.7	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
Xylenes, Total	<5.0		37	5.0	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:02	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	93			75 - 125			12/02/14 11:45	12/08/14 23:02	50
4-Bromofluorobenzene (Surr)	90			75 - 120			12/02/14 11:45	12/08/14 23:02	50
Dibromofluoromethane	105			75 - 120			12/02/14 11:45	12/08/14 23:02	50
Toluene-d8 (Surr)	106			75 - 120			12/02/14 11:45	12/08/14 23:02	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<9.6		39	9.6	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
2-Methylnaphthalene	<7.2		39	7.2	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Acenaphthene	<7.1		39	7.1	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Acenaphthylene	<5.2		39	5.2	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Anthracene	<6.6		39	6.6	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Benzo[a]anthracene	34 J		39	5.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Benzo[a]pyrene	22 J		39	7.6	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Benzo[b]fluoranthene	34 J		39	8.5	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Benzo[g,h,i]perylene	18 J		39	13	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Benzo[k]fluoranthene	23 J		39	12	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Chrysene	36 J		39	11	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Dibenz(a,h)anthracene	8.8 J		39	7.6	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Fluoranthene	55		39	7.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Fluorene	<5.5		39	5.5	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Indeno[1,2,3-cd]pyrene	19 J		39	10	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Naphthalene	<6.0		39	6.0	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Phenanthrene	26 J		39	5.5	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
Pyrene	51		39	7.8	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:32	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	57			25 - 119			12/05/14 16:30	12/09/14 21:32	1
Nitrobenzene-d5 (Surr)	52			25 - 115			12/05/14 16:30	12/09/14 21:32	1
Terphenyl-d14 (Surr)	79			36 - 134			12/05/14 16:30	12/09/14 21:32	1

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.2		20	7.2	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
PCB-1221	<8.9		20	8.9	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
PCB-1232	<8.9		20	8.9	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
PCB-1242	<6.7		20	6.7	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-GP-1, 3-4'

**Lab Sample ID:** 500-88912-1

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 80.4

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<8.0		20	8.0	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
PCB-1254	<4.4		20	4.4	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
PCB-1260	<10		20	10	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	100		48 - 142				12/08/14 18:08	12/09/14 02:36	1
Tetrachloro-m-xylene	80		50 - 116				12/08/14 18:08	12/09/14 02:36	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.9		1.2	0.24	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Barium	140		1.2	0.13	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Cadmium	0.91		0.24	0.030	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Chromium	17		1.2	0.14	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Lead	70		0.60	0.18	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Selenium	<0.43		1.2	0.43	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1
Silver	<0.043		0.60	0.043	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:30	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.020	0.0077	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:29	1

**Client Sample ID:** PP-SB-GP-1, 3-4' FD

**Lab Sample ID:** 500-88912-2

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 79.8

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1,1-Trichloroethane	<15		75	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1,2,2-Tetrachloroethane	<18		75	18	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1,2-Trichloroethane	<21		75	21	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1-Dichloroethane	<14		75	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1-Dichloroethene	<23		75	23	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,1-Dichloropropene	<26		75	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2,3-Trichlorobenzene	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2,3-Trichloropropane	<43		150	43	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2,4-Trichlorobenzene	<29		150	29	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2,4-Trimethylbenzene	<16		150	16	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2-Dibromo-3-Chloropropane	<66		150	66	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2-Dibromoethane	<24		150	24	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2-Dichlorobenzene	<15		150	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2-Dichloroethane	<22		75	22	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,2-Dichloropropene	<15		75	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,3,5-Trimethylbenzene	<16		150	16	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,3-Dichlorobenzene	<19		150	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,3-Dichloropropane	<10		75	10	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
1,4-Dichlorobenzene	<13		150	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
2,2-Dichloropropane	<24		75	24	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
2-Chlorotoluene	<16		75	16	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-1, 3-4' FD

Lab Sample ID: 500-88912-2

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 79.8

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<15		75	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Benzene	<5.6		19	5.6	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Bromobenzene	<32		150	32	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Bromoform	<29		150	29	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Bromochloromethane	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Bromodichloromethane	<26		150	33	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Bromomethane	<51		150	51	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Carbon tetrachloride	<19		75	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Chlorobenzene	<11		75	11	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Chloroethane	<33		150	33	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Chloroform	<15		75	15	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Chloromethane	<35 *		150	35	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
cis-1,2-Dichloroethene	<9.3		75	9.3	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
cis-1,3-Dichloropropene	<13		75	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Dibromochloromethane	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Dibromomethane	<36		150	36	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Dichlorodifluoromethane	<39 *		150	39	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Ethylbenzene	<9.5		19	9.5	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Hexachlorobutadiene	<26		150	26	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Isopropyl ether	<11		150	11	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Isopropylbenzene	<19		150	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Methyl tert-butyl ether	<32		150	32	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Methylene Chloride	<52		380	52	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Naphthalene	<37		150	37	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
n-Butylbenzene	<9.7		75	9.7	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
N-Propylbenzene	<13		150	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
p-Isopropyltoluene	<14		150	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
sec-Butylbenzene	<12		75	12	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Styrene	<7.5		75	7.5	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
tert-Butylbenzene	<10		75	10	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Tetrachloroethene	<13		75	13	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Toluene	<8.7		19	8.7	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
trans-1,2-Dichloroethene	<19		75	19	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
trans-1,3-Dichloropropene	<16		75	16	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Trichloroethene	<14		38	14	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Trichlorofluoromethane	<31		150	31	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Vinyl chloride	<7.9 *		19	7.9	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
Xylenes, Total	<5.2		38	5.2	ug/Kg	⊗	12/02/14 11:45	12/08/14 23:27	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Sur)	93		75 - 125				12/02/14 11:45	12/08/14 23:27	50
4-Bromofluorobenzene (Sur)	91		75 - 120				12/02/14 11:45	12/08/14 23:27	50
Dibromofluoromethane	104		75 - 120				12/02/14 11:45	12/08/14 23:27	50
Toluene-d8 (Sur)	106		75 - 120				12/02/14 11:45	12/08/14 23:27	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<10		41	10	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
2-Methylnaphthalene	<7.7		41	7.7	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Acenaphthene	<7.5		41	7.5	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1

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## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-1, 3-4' FD**

**Lab Sample ID: 500-88912-2**

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 79.8

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	<5.5		41	5.5	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Anthracene	<7.0		41	7.0	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Benzo[a]anthracene	<5.6		41	5.6	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Benzo[a]pyrene	<8.1		41	8.1	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Benzo[b]fluoranthene	<9.0		41	9.0	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Benzo[g,h,i]perylene	<13		41	13	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Benzo[k]fluoranthene	<12		41	12	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Chrysene	<11		41	11	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Dibenz(a,h)anthracene	<8.0		41	8.0	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Fluoranthene	9.4 J		41	7.7	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Fluorene	<5.8		41	5.8	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Indeno[1,2,3-cd]pyrene	<11		41	11	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Naphthalene	<6.4		41	6.4	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Phenanthrene	<5.8		41	5.8	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
Pyrene	11 J		41	8.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 21:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	51			25 - 119			12/05/14 16:30	12/09/14 21:53	1
Nitrobenzene-d5 (Sur)	49			25 - 115			12/05/14 16:30	12/09/14 21:53	1
Terphenyl-d14 (Sur)	89			36 - 134			12/05/14 16:30	12/09/14 21:53	1

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<7.4		21	7.4	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1221	<9.1		21	9.1	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1232	<9.1		21	9.1	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1242	<6.8		21	6.8	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1248	<8.2		21	8.2	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1254	<4.5		21	4.5	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
PCB-1260	<10		21	10	ug/Kg	⊗	12/08/14 18:08	12/09/14 02:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	90			48 - 142			12/08/14 18:08	12/09/14 02:50	1
Tetrachloro-m-xylene	83			50 - 116			12/08/14 18:08	12/09/14 02:50	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.4		1.2	0.24	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Barium	140		1.2	0.13	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Cadmium	1.2		0.24	0.030	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Chromium	16		1.2	0.14	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Lead	110		0.59	0.18	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Selenium	<0.42		1.2	0.42	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1
Silver	<0.043		0.59	0.043	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:35	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.019	0.0073	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:31	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-2, 1-2'

Lab Sample ID: 500-88912-3

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.4

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<24		140	24	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1,1-Trichloroethane	<14		68	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1,2,2-Tetrachloroethane	<16		68	16	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1,2-Trichloroethane	<19		68	19	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1-Dichloroethane	<13		68	13	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1-Dichloroethene	<21		68	21	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,1-Dichloropropene	<23		68	23	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2,3-Trichlorobenzene	<24		140	24	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2,3-Trichloropropane	<39		140	39	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2,4-Trichlorobenzene	<26		140	26	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2,4-Trimethylbenzene	<14		140	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2-Dibromo-3-Chloropropane	<59		140	59	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2-Dibromoethane	<21		140	21	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2-Dichlorobenzene	<14		140	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2-Dichloroethane	<19		68	19	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,2-Dichloropropane	<13		68	13	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,3,5-Trimethylbenzene	<14		140	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,3-Dichlorobenzene	<18		140	18	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,3-Dichloropropane	<9.1		68	9.1	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
1,4-Dichlorobenzene	<12		140	12	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
2,2-Dichloropropane	<22		68	22	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
2-Chlorotoluene	<14		68	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
4-Chlorotoluene	<13		68	13	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Benzene	<5.1		17	5.1	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Bromobenzene	<29		140	29	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Bromochloromethane	<26		140	26	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Bromodichloromethane	<23		140	23	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Bromoform	<30		140	30	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Bromomethane	<47		140	47	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Carbon tetrachloride	<18		68	18	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Chlorobenzene	<9.8		68	9.8	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Chloroethane	<30		140	30	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Chloroform	<14		68	14	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Chloromethane	<32 *		140	32	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
cis-1,2-Dichloroethene	<8.4		68	8.4	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
cis-1,3-Dichloropropene	<12		68	12	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Dibromochloromethane	<24		140	24	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Dibromomethane	<33		140	33	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Dichlorodifluoromethane	<35 *		140	35	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Ethylbenzene	<8.6		17	8.6	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Hexachlorobutadiene	<24		140	24	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Isopropyl ether	<10		140	10	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Isopropylbenzene	<17		140	17	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Methyl tert-butyl ether	<29		140	29	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Methylene Chloride	<47		340	47	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
Naphthalene	<34		140	34	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
n-Butylbenzene	<8.8		68	8.8	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
N-Propylbenzene	<12		140	12	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50
p-Isopropyltoluene	<13		140	13	ug/Kg	●	12/02/14 12:25	12/08/14 23:52	50

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-GP-2, 1-2'

**Lab Sample ID:** 500-88912-3

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.4

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<11		68	11	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Styrene	<6.7		68	6.7	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
tert-Butylbenzene	<9.3		68	9.3	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Tetrachloroethene	<11		68	11	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Toluene	<7.8		17	7.8	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
trans-1,2-Dichloroethene	<17		68	17	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
trans-1,3-Dichloropropene	<14		68	14	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Trichloroethene	<13		34	13	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Trichlorofluoromethane	<28		140	28	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Vinyl chloride	<7.1 *		17	7.1	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
Xylenes, Total	59		34	4.7	ug/Kg	⊗	12/02/14 12:25	12/08/14 23:52	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	93		75 - 125				12/02/14 12:25	12/08/14 23:52	50
4-Bromofluorobenzene (Surr)	94		75 - 120				12/02/14 12:25	12/08/14 23:52	50
Dibromofluoromethane	104		75 - 120				12/02/14 12:25	12/08/14 23:52	50
Toluene-d8 (Surr)	104		75 - 120				12/02/14 12:25	12/08/14 23:52	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	340		39	9.5	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
2-Methylnaphthalene	370		39	7.1	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Acenaphthene	50		39	7.0	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Acenaphthylene	<5.1		39	5.1	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Anthracene	86		39	6.5	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Benzo[a]anthracene	360		39	5.2	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Benzo[a]pyrene	240		39	7.5	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Benzo[b]fluoranthene	380		39	8.4	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Benzo[g,h,i]perylene	200		39	13	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Benzo[k]fluoranthene	160		39	11	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Chrysene	380		39	11	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Dibenz(a,h)anthracene	60		39	7.5	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Fluoranthene	800		39	7.2	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Fluorene	34 J		39	5.5	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Indeno[1,2,3-cd]pyrene	150		39	10	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Naphthalene	150		39	6.0	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Phenanthrene	750		39	5.4	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
Pyrene	570		39	7.7	ug/Kg	⊗	12/05/14 16:30	12/10/14 02:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	56		25 - 119				12/05/14 16:30	12/10/14 02:57	1
Nitrobenzene-d5 (Surr)	45		25 - 115				12/05/14 16:30	12/10/14 02:57	1
Terphenyl-d14 (Surr)	60		36 - 134				12/05/14 16:30	12/10/14 02:57	1

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.9		20	6.9	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
PCB-1221	<8.6		20	8.6	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
PCB-1232	<8.5		20	8.5	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
PCB-1242	<6.4		20	6.4	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-GP-2, 1-2'

**Lab Sample ID:** 500-88912-3

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.4

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<7.7		20	7.7	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
PCB-1254	<4.2		20	4.2	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
PCB-1260	<9.6		20	9.6	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:04	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	84		48 - 142				12/08/14 18:08	12/09/14 03:04	1
Tetrachloro-m-xylene	78		50 - 116				12/08/14 18:08	12/09/14 03:04	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.5		1.1	0.22	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1
Barium	50		1.1	0.12	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1
Cadmium	7.3		0.22	0.029	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1
Chromium	11		1.1	0.13	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1
Lead	1900		2.8	0.84	mg/Kg	⊗	12/08/14 16:39	12/11/14 13:35	5
Selenium	1.2		1.1	0.40	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1
Silver	0.98		0.56	0.041	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:39	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.083		0.019	0.0073	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:33	1

**Client Sample ID:** PP-SB-GP-3, 1-2'

**Lab Sample ID:** 500-88912-4

Date Collected: 12/02/14 14:00

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 92.2

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<24		140	24	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1,1-Trichloroethane	<14		69	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1,2,2-Tetrachloroethane	<16		69	16	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1,2-Trichloroethane	<19		69	19	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1-Dichloroethane	<13		69	13	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1-Dichloroethene	<21		69	21	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,1-Dichloropropene	<24		69	24	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2,3-Trichlorobenzene	<24		140	24	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2,3-Trichloropropane	<39		140	39	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2,4-Trichlorobenzene	<26		140	26	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2,4-Trimethylbenzene	<15		140	15	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2-Dibromo-3-Chloropropane	<60		140	60	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2-Dibromoethane	<22		140	22	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2-Dichlorobenzene	<14		140	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2-Dichloroethane	<20		69	20	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,2-Dichloropropane	<13		69	13	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,3,5-Trimethylbenzene	<14		140	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,3-Dichlorobenzene	<18		140	18	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,3-Dichloropropane	<9.2		69	9.2	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
1,4-Dichlorobenzene	<12		140	12	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
2,2-Dichloropropane	<22		69	22	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
2-Chlorotoluene	<14		69	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-SB-GP-3, 1-2'

Lab Sample ID: 500-88912-4

Date Collected: 12/02/14 14:00

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 92.2

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<14		69	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Benzene	<5.1		17	5.1	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Bromobenzene	<29		140	29	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Bromoform	<26		140	26	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Bromochloromethane	<23		140	23	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Bromodichloromethane	<30		140	30	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Bromomethane	<47		140	47	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Carbon tetrachloride	<18		69	18	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Chlorobenzene	<9.8		69	9.8	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Chloroethane	<30		140	30	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Chloroform	<14		69	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Chloromethane	<32 *		140	32	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
cis-1,2-Dichloroethene	<8.5		69	8.5	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
cis-1,3-Dichloropropene	<12		69	12	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Dibromochloromethane	<24		140	24	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Dibromomethane	<33		140	33	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Dichlorodifluoromethane	<35 *		140	35	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Ethylbenzene	<8.7		17	8.7	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Hexachlorobutadiene	<24		140	24	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Isopropyl ether	<10		140	10	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Isopropylbenzene	<17		140	17	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Methyl tert-butyl ether	<30		140	30	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Methylene Chloride	<47		340	47	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Naphthalene	<34		140	34	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
n-Butylbenzene	<8.9		69	8.9	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
N-Propylbenzene	<12		140	12	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
p-Isopropyltoluene	<13		140	13	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
sec-Butylbenzene	<11		69	11	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Styrene	<6.8		69	6.8	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
tert-Butylbenzene	<9.3		69	9.3	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Tetrachloroethene	<11		69	11	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Toluene	25		17	7.9	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
trans-1,2-Dichloroethene	<17		69	17	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
trans-1,3-Dichloropropene	<14		69	14	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Trichloroethene	<13		34	13	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Trichlorofluoromethane	<29		140	29	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Vinyl chloride	<7.1 *		17	7.1	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
Xylenes, Total	83		34	4.7	ug/Kg	⊗	12/02/14 14:00	12/09/14 00:17	50
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Sur)	95		75 - 125				12/02/14 14:00	12/09/14 00:17	50
4-Bromofluorobenzene (Sur)	92		75 - 120				12/02/14 14:00	12/09/14 00:17	50
Dibromofluoromethane	104		75 - 120				12/02/14 14:00	12/09/14 00:17	50
Toluene-d8 (Sur)	105		75 - 120				12/02/14 14:00	12/09/14 00:17	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	160	J	180	43	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
2-Methylnaphthalene	230		180	33	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Acenaphthene	<32		180	32	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-3, 1-2'**

**Lab Sample ID: 500-88912-4**

Date Collected: 12/02/14 14:00

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 92.2

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	41	J	180	23	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Anthracene	53	J	180	30	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Benzo[a]anthracene	410		180	24	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Benzo[a]pyrene	270		180	34	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Benzo[b]fluoranthene	580		180	38	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Benzo[g,h,i]perylene	220		180	57	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Benzo[k]fluoranthene	200		180	52	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Chrysene	460		180	48	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Dibenz(a,h)anthracene	84	J	180	34	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Fluoranthene	760		180	33	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Fluorene	<25		180	25	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Indeno[1,2,3-cd]pyrene	200		180	46	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Naphthalene	94	J	180	27	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Phenanthrene	630		180	25	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
Pyrene	670		180	35	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:28	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	46		25 - 119				12/05/14 16:30	12/10/14 13:28	5
Nitrobenzene-d5 (Sur)	52		25 - 115				12/05/14 16:30	12/10/14 13:28	5
Terphenyl-d14 (Sur)	64		36 - 134				12/05/14 16:30	12/10/14 13:28	5

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14		1.0	0.20	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1
Barium	63		1.0	0.11	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1
Cadmium	1.3		0.20	0.026	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1
Chromium	15		1.0	0.12	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1
Lead	550		2.5	0.75	mg/Kg	⊗	12/08/14 16:39	12/11/14 13:51	5
Selenium	1.1		1.0	0.36	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1
Silver	0.56		0.50	0.036	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:43	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.017	0.0066	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:35	1

**Client Sample ID: PP-SB-GP-4, 4-8'**

**Lab Sample ID: 500-88912-5**

Date Collected: 12/02/14 15:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 85.9

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		130	23	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1,1-Trichloroethane	<14		67	14	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1,2,2-Tetrachloroethane	<16		67	16	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1,2-Trichloroethane	<19		67	19	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1-Dichloroethane	<12		67	12	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1-Dichloroethene	<21		67	21	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,1-Dichloropropene	<23		67	23	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,2,3-Trichlorobenzene	<24		130	24	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
1,2,3-Trichloropropane	<39		130	39	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-4, 4-8'

Lab Sample ID: 500-88912-5

Date Collected: 12/02/14 15:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<25		130	25	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2,4-Trimethylbenzene	190		130	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2-Dibromo-3-Chloropropane	<59		130	59	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2-Dibromoethane	<21		130	21	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2-Dichlorobenzene	<14		130	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2-Dichloroethane	<19		67	19	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,2-Dichloropropane	<13		67	13	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,3,5-Trimethylbenzene	60 J		130	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,3-Dichlorobenzene	<17		130	17	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,3-Dichloropropane	<9.0		67	9.0	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
1,4-Dichlorobenzene	<12		130	12	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
2,2-Dichloropropane	<21		67	21	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
2-Chlorotoluene	<14		67	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
4-Chlorotoluene	<13		67	13	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Benzene	<5.0		17	5.0	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Bromobenzene	<29		130	29	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Bromochloromethane	<25		130	25	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Bromodichloromethane	<23		130	23	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Bromoform	<30		130	30	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Bromomethane	<46		130	46	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Carbon tetrachloride	<17		67	17	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Chlorobenzene	<9.6		67	9.6	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Chloroethane	<29		130	29	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Chloroform	<14		67	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Chloromethane	<31 *		130	31	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
cis-1,2-Dichloroethene	<8.3		67	8.3	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
cis-1,3-Dichloropropene	<12		67	12	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Dibromochloromethane	<23		130	23	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Dibromomethane	<32		130	32	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Dichlorodifluoromethane	<35 *		130	35	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Ethylbenzene	<8.5		17	8.5	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Hexachlorobutadiene	<23		130	23	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Isopropyl ether	<9.9		130	9.9	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Isopropylbenzene	37 J		130	17	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Methyl tert-butyl ether	<29		130	29	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Methylene Chloride	<46		340	46	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Naphthalene	740		130	33	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
n-Butylbenzene	130		67	8.7	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
N-Propylbenzene	62 J		130	12	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
p-Isopropyltoluene	100 J		130	12	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
sec-Butylbenzene	170		67	10	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Styrene	<6.7		67	6.7	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
tert-Butylbenzene	<9.2		67	9.2	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Tetrachloroethene	<11		67	11	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Toluene	<7.7		17	7.7	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
trans-1,2-Dichloroethene	<17		67	17	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
trans-1,3-Dichloropropene	<14		67	14	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Trichloroethene	<13		34	13	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50
Trichlorofluoromethane	<28		130	28	ug/Kg	●	12/02/14 15:45	12/09/14 00:42	50

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-4, 4-8'**

**Lab Sample ID: 500-88912-5**

Date Collected: 12/02/14 15:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<7.0	*	17	7.0	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
Xylenes, Total	63		34	4.6	ug/Kg	⊗	12/02/14 15:45	12/09/14 00:42	50
<b>Surrogate</b>									
1,2-Dichloroethane-d4 (Surr)	93		75 - 125				12/02/14 15:45	12/09/14 00:42	50
4-Bromofluorobenzene (Surr)	93		75 - 120				12/02/14 15:45	12/09/14 00:42	50
DibromoFluoromethane	104		75 - 120				12/02/14 15:45	12/09/14 00:42	50
Toluene-d8 (Surr)	103		75 - 120				12/02/14 15:45	12/09/14 00:42	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	3200		370	92	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
2-Methylnaphthalene	4900		370	69	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Acenaphthene	<68		370	68	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Acenaphthylene	<50		370	50	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Anthracene	250	J	370	63	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Benzo[a]anthracene	770		370	51	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Benzo[a]pyrene	420		370	73	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Benzo[b]fluoranthene	900		370	81	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Benzo[g,h,i]perylene	440		370	120	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Benzo[k]fluoranthene	340	J	370	110	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Chrysene	870		370	100	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Dibenz(a,h)anthracene	<73		370	73	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Fluoranthene	1700		370	70	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Fluorene	560		370	53	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Indeno[1,2,3-cd]pyrene	370		370	97	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Naphthalene	1100		370	58	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Phenanthrene	5000		370	52	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
Pyrene	4300		370	75	ug/Kg	⊗	12/05/14 16:30	12/10/14 13:49	10
<b>Surrogate</b>									
2-Fluorobiphenyl	51		25 - 119				12/05/14 16:30	12/10/14 13:49	10
Nitrobenzene-d5 (Surr)	37		25 - 115				12/05/14 16:30	12/10/14 13:49	10
Terphenyl-d14 (Surr)	96		36 - 134				12/05/14 16:30	12/10/14 13:49	10

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.6		1.1	0.22	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Barium	61		1.1	0.12	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Cadmium	0.99		0.22	0.028	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Chromium	5.8		1.1	0.13	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Lead	130		0.56	0.17	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Selenium	<0.40		1.1	0.40	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1
Silver	<0.041		0.56	0.041	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:48	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.078		0.019	0.0074	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:37	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-GP-4, 8-10'

Lab Sample ID: 500-88912-6

Date Collected: 12/02/14 15:50

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<23		130	23	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1,1-Trichloroethane	<13		66	13	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1,2,2-Tetrachloroethane	<15		66	15	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1,2-Trichloroethane	<18		66	18	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1-Dichloroethane	<12		66	12	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1-Dichloroethene	<20		66	20	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,1-Dichloropropene	<23		66	23	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2,3-Trichlorobenzene	<23		130	23	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2,3-Trichloropropane	<38		130	38	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2,4-Trichlorobenzene	<25		130	25	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2,4-Trimethylbenzene	33 J		130	14	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2-Dibromo-3-Chloropropane	<57		130	57	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2-Dibromoethane	<21		130	21	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2-Dichlorobenzene	<14		130	14	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2-Dichloroethane	<19		66	19	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,2-Dichloropropane	<13		66	13	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,3,5-Trimethylbenzene	<14		130	14	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,3-Dichlorobenzene	<17		130	17	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,3-Dichloropropane	<8.8		66	8.8	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
1,4-Dichlorobenzene	<11		130	11	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
2,2-Dichloropropane	<21		66	21	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
2-Chlorotoluene	<14		66	14	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
4-Chlorotoluene	<13		66	13	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Benzene	<4.9		16	4.9	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Bromobenzene	<28		130	28	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Bromochloromethane	<25		130	25	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Bromodichloromethane	<22		130	22	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Bromoform	<29		130	29	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Bromomethane	<45		130	45	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Carbon tetrachloride	<17		66	17	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Chlorobenzene	<9.4		66	9.4	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Chloroethane	<29		130	29	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Chloroform	<14		66	14	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Chloromethane	<30 *		130	30	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
cis-1,2-Dichloroethene	<8.1		66	8.1	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
cis-1,3-Dichloropropene	<12		66	12	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Dibromochloromethane	<23		130	23	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Dibromomethane	<32		130	32	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Dichlorodifluoromethane	<34 *		130	34	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Ethylbenzene	<8.3		16	8.3	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Hexachlorobutadiene	<23		130	23	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Isopropyl ether	<9.7		130	9.7	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Isopropylbenzene	<17		130	17	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Methyl tert-butyl ether	<28		130	28	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Methylene Chloride	<45		330	45	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
Naphthalene	130		130	33	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
n-Butylbenzene	<8.5		66	8.5	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
N-Propylbenzene	13 J		130	12	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50
p-Isopropyltoluene	<12		130	12	ug/Kg	●	12/02/14 15:50	12/09/14 09:20	50

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-4, 8-10'**

**Lab Sample ID: 500-88912-6**

Date Collected: 12/02/14 15:50

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<10		66	10	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Styrene	<6.5		66	6.5	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
tert-Butylbenzene	<9.0		66	9.0	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Tetrachloroethene	<11		66	11	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Toluene	<7.6		16	7.6	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
trans-1,2-Dichloroethene	<16		66	16	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
trans-1,3-Dichloropropene	<14		66	14	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Trichloroethene	<12		33	12	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Trichlorofluoromethane	<27		130	27	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Vinyl chloride	<6.9 *		16	6.9	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
Xylenes, Total	<4.5		33	4.5	ug/Kg	⊗	12/02/14 15:50	12/09/14 09:20	50
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	91			75 - 125			12/02/14 15:50	12/09/14 09:20	50
4-Bromofluorobenzene (Surr)	91			75 - 120			12/02/14 15:50	12/09/14 09:20	50
Dibromofluoromethane	101			75 - 120			12/02/14 15:50	12/09/14 09:20	50
Toluene-d8 (Surr)	105			75 - 120			12/02/14 15:50	12/09/14 09:20	50

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	19	J	37	9.1	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
2-Methylnaphthalene	25	J	37	6.9	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Acenaphthene	<6.7		37	6.7	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Acenaphthylene	<4.9		37	4.9	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Anthracene	<6.3		37	6.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Benzo[a]anthracene	<5.0		37	5.0	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Benzo[a]pyrene	<7.3		37	7.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Benzo[b]fluoranthene	<8.1		37	8.1	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Benzo[g,h,i]perylene	<12		37	12	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Benzo[k]fluoranthene	<11		37	11	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Chrysene	<10		37	10	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Dibenz(a,h)anthracene	<7.2		37	7.2	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Fluoranthene	<6.9		37	6.9	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Fluorene	<5.3		37	5.3	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Indeno[1,2,3-cd]pyrene	<9.7		37	9.7	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Naphthalene	15	J	37	5.8	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Phenanthrene	18	J	37	5.2	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
Pyrene	7.7	J	37	7.4	ug/Kg	⊗	12/05/14 16:30	12/09/14 22:13	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	48			25 - 119			12/05/14 16:30	12/09/14 22:13	1
Nitrobenzene-d5 (Surr)	46			25 - 115			12/05/14 16:30	12/09/14 22:13	1
Terphenyl-d14 (Surr)	72			36 - 134			12/05/14 16:30	12/09/14 22:13	1

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<6.6		19	6.6	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
PCB-1221	<8.2		19	8.2	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
PCB-1232	<8.1		19	8.1	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
PCB-1242	<6.1		19	6.1	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-4, 8-10'**

**Lab Sample ID: 500-88912-6**

Date Collected: 12/02/14 16:50

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<7.3		19	7.3	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
PCB-1254	<4.0		19	4.0	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
PCB-1260	<9.1		19	9.1	ug/Kg	⊗	12/08/14 18:08	12/09/14 03:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl	102		48 - 142				12/08/14 18:08	12/09/14 03:17	1
Tetrachloro-m-xylene	73		50 - 116				12/08/14 18:08	12/09/14 03:17	1

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.4		1.1	0.21	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Barium	75	V	1.1	0.11	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Cadmium	0.17	J	0.21	0.027	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Chromium	14	V	1.1	0.12	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Lead	15		0.53	0.16	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Selenium	0.38	J	1.1	0.38	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1
Silver	<0.038		0.53	0.038	mg/Kg	⊗	12/08/14 16:39	12/09/14 18:52	1

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0074	mg/Kg	⊗	12/09/14 14:00	12/10/14 09:40	1

**Client Sample ID: PP-SB-TB**

**Lab Sample ID: 500-88912-7**

Date Collected: 12/02/14 00:00

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<17		100	17	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1,1-Trichloroethane	<10		50	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1,2,2-Tetrachloroethane	<12		50	12	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1,2-Trichloroethane	<14		50	14	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1-Dichloroethane	<9.3		50	9.3	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1-Dichloroethene	<15		50	15	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,1-Dichloropropene	<17		50	17	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2,3-Trichlorobenzene	<18		100	18	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2,3-Trichloropropane	<29		100	29	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2,4-Trichlorobenzene	<19		100	19	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2,4-Trimethylbenzene	<11		100	11	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2-Dibromo-3-Chloropropane	<44		100	44	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2-Dibromoethane	<16		100	16	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2-Dichlorobenzene	<10		100	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2-Dichloroethane	<14		50	14	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,2-Dichloropropene	<9.8		50	9.8	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,3,5-Trimethylbenzene	<10		100	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,3-Dichlorobenzene	<13		100	13	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,3-Dichloropropane	<6.7		50	6.7	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
1,4-Dichlorobenzene	<8.7		100	8.7	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
2,2-Dichloropropane	<16		50	16	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
2-Chlorotoluene	<10		50	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-TB

**Lab Sample ID:** 500-88912-7

Date Collected: 12/02/14 00:00

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<9.9		50	9.9	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Benzene	<3.7		13	3.7	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromobenzene	<21		100	21	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromoform	<19		100	19	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromochloromethane	<17		100	17	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromodichloromethane	<17		100	22	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromoform	<22		100	34	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Bromomethane	<13		50	13	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Carbon tetrachloride	<13		50	7.2	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Chlorobenzene	<7.2		50	22	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Chloroethane	<22		100	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Chloroform	<10		50	23	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Chloromethane	<23 *		100	6.2	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
cis-1,2-Dichloroethene	<6.2		50	8.9	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
cis-1,3-Dichloropropene	<8.9		50	17	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Dibromochloromethane	<17		100	24	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Dibromomethane	<24		100	26	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Dichlorodifluoromethane	<26 *		100	26	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Ethylbenzene	<6.3		13	6.3	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Hexachlorobutadiene	<17		100	17	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Isopropyl ether	<7.4		100	7.4	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Isopropylbenzene	<13		100	13	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Methyl tert-butyl ether	<22		100	22	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Methylene Chloride	<34		250	34	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Naphthalene	<25		100	25	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
n-Butylbenzene	<6.5		50	6.5	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
N-Propylbenzene	<8.8		100	8.8	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
p-Isopropyltoluene	<9.3		100	9.3	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
sec-Butylbenzene	<7.7		50	7.7	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Styrene	<4.9		50	4.9	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
tert-Butylbenzene	<6.8		50	6.8	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Tetrachloroethene	<8.4		50	8.4	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Toluene	<5.8		13	5.8	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
trans-1,2-Dichloroethene	<13		50	13	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
trans-1,3-Dichloropropene	<10		50	10	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Trichloroethene	<9.3		25	9.3	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Trichlorofluoromethane	<21		100	21	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Vinyl chloride	<5.2 *		13	5.2	ug/Kg		12/02/14 00:00	12/09/14 01:32	50
Xylenes, Total	<3.4		25	3.4	ug/Kg		12/02/14 00:00	12/09/14 01:32	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		75 - 125	12/02/14 00:00	12/09/14 01:32	50
4-Bromofluorobenzene (Surr)	91		75 - 120	12/02/14 00:00	12/09/14 01:32	50
Dibromofluoromethane	105		75 - 120	12/02/14 00:00	12/09/14 01:32	50
Toluene-d8 (Surr)	105		75 - 120	12/02/14 00:00	12/09/14 01:32	50

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-SB-EB

Lab Sample ID: 500-88912-8

Date Collected: 12/03/14 12:30

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/09/14 01:57	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/09/14 01:57	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/09/14 01:57	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 01:57	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/09/14 01:57	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/09/14 01:57	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/09/14 01:57	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/09/14 01:57	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/09/14 01:57	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/09/14 01:57	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 01:57	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/09/14 01:57	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/09/14 01:57	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/09/14 01:57	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 01:57	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L			12/09/14 01:57	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/09/14 01:57	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 01:57	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/09/14 01:57	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 01:57	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/09/14 01:57	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/09/14 01:57	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/09/14 01:57	1
Benzene	<0.074		0.50	0.074	ug/L			12/09/14 01:57	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/09/14 01:57	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/09/14 01:57	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/09/14 01:57	1
Bromoform	<0.28		1.0	0.28	ug/L			12/09/14 01:57	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/09/14 01:57	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/09/14 01:57	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/09/14 01:57	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/09/14 01:57	1
Chloroform	<0.20		1.0	0.20	ug/L			12/09/14 01:57	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/09/14 01:57	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/09/14 01:57	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 01:57	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 01:57	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 01:57	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 01:57	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 01:57	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 01:57	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 01:57	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 01:57	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 01:57	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 01:57	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 01:57	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 01:57	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 01:57	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 01:57	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-EB

**Lab Sample ID:** 500-88912-8

Date Collected: 12/03/14 12:30

Matrix: Water

Date Received: 12/04/14 09:40

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 01:57	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 01:57	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 01:57	1
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/09/14 01:57	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 01:57	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 01:57	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 01:57	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 01:57	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 01:57	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 01:57	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 01:57	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					12/09/14 01:57	1
4-Bromofluorobenzene (Surr)	91		75 - 120					12/09/14 01:57	1
Dibromofluoromethane	105		75 - 120					12/09/14 01:57	1
Toluene-d8 (Surr)	105		75 - 120					12/09/14 01:57	1

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.23		0.76	0.23	ug/L			12/04/14 16:41	12/11/14 01:01
2-Methylnaphthalene	<0.050		0.38	0.050	ug/L			12/04/14 16:41	12/11/14 01:01
Acenaphthene	<0.24		0.76	0.24	ug/L			12/04/14 16:41	12/11/14 01:01
Acenaphthylene	<0.20		0.76	0.20	ug/L			12/04/14 16:41	12/11/14 01:01
Anthracene	<0.25		0.76	0.25	ug/L			12/04/14 16:41	12/11/14 01:01
Benzo[a]anthracene	<0.043		0.15	0.043	ug/L			12/04/14 16:41	12/11/14 01:01
Benzo[a]pyrene	<0.075		0.15	0.075	ug/L			12/04/14 16:41	12/11/14 01:01
Benzo[b]fluoranthene	<0.061		0.15	0.061	ug/L			12/04/14 16:41	12/11/14 01:01
Benzo[g,h,i]perylene	<0.29		0.76	0.29	ug/L			12/04/14 16:41	12/11/14 01:01
Benzo[k]fluoranthene	<0.049		0.15	0.049	ug/L			12/04/14 16:41	12/11/14 01:01
Chrysene	<0.052		0.38	0.052	ug/L			12/04/14 16:41	12/11/14 01:01
Dibenz(a,h)anthracene	<0.039		0.23	0.039	ug/L			12/04/14 16:41	12/11/14 01:01
Fluoranthene	<0.35		0.76	0.35	ug/L			12/04/14 16:41	12/11/14 01:01
Fluorene	<0.19		0.76	0.19	ug/L			12/04/14 16:41	12/11/14 01:01
Indeno[1,2,3-cd]pyrene	<0.057		0.15	0.057	ug/L			12/04/14 16:41	12/11/14 01:01
Naphthalene	<0.24		0.76	0.24	ug/L			12/04/14 16:41	12/11/14 01:01
Phenanthrene	<0.23		0.76	0.23	ug/L			12/04/14 16:41	12/11/14 01:01
Pyrene	<0.32		0.76	0.32	ug/L			12/04/14 16:41	12/11/14 01:01
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	91		41 - 132					12/04/14 16:41	12/11/14 01:01
Nitrobenzene-d5 (Surr)	92		47 - 134					12/04/14 16:41	12/11/14 01:01
Terphenyl-d14 (Surr)	97		59 - 150					12/04/14 16:41	12/11/14 01:01

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.032		0.19	0.032	ug/L			12/05/14 11:05	12/05/14 16:44
PCB-1221	<0.096		0.19	0.096	ug/L			12/05/14 11:05	12/05/14 16:44
PCB-1232	<0.096		0.19	0.096	ug/L			12/05/14 11:05	12/05/14 16:44
PCB-1242	<0.096		0.19	0.096	ug/L			12/05/14 11:05	12/05/14 16:44

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-SB-EB

**Lab Sample ID:** 500-88912-8

Date Collected: 12/03/14 12:30

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.096		0.19	0.096	ug/L		12/05/14 11:05	12/05/14 16:44	1
PCB-1254	<0.096		0.19	0.096	ug/L		12/05/14 11:05	12/05/14 16:44	1
PCB-1260	<0.034		0.19	0.034	ug/L		12/05/14 11:05	12/05/14 16:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	91		50 - 120				12/05/14 11:05	12/05/14 16:44	1
DCB Decachlorobiphenyl	60		29 - 126				12/05/14 11:05	12/05/14 16:44	1

**Method: 6010B - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.6		10	2.6	ug/L		12/05/14 10:40	12/11/14 12:24	1
Barium	6.2	J B	10	1.1	ug/L		12/05/14 10:40	12/11/14 12:24	1
Cadmium	<0.26		2.0	0.26	ug/L		12/05/14 10:40	12/11/14 12:24	1
Chromium	<1.0		10	1.0	ug/L		12/05/14 10:40	12/11/14 12:24	1
Lead	<2.3		5.0	2.3	ug/L		12/05/14 10:40	12/11/14 12:24	1
Selenium	<4.6		10	4.6	ug/L		12/05/14 10:40	12/11/14 12:24	1
Silver	<0.57		5.0	0.57	ug/L		12/05/14 10:40	12/11/14 12:24	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.072		0.20	0.072	ug/L		12/05/14 11:15	12/08/14 11:02	1

**Client Sample ID:** PP-GW-MW-2

**Lab Sample ID:** 500-88912-9

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/09/14 02:22	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/09/14 02:22	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/09/14 02:22	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 02:22	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/09/14 02:22	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/09/14 02:22	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/09/14 02:22	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/09/14 02:22	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/09/14 02:22	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/09/14 02:22	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:22	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/09/14 02:22	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/09/14 02:22	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/09/14 02:22	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 02:22	1
1,2-Dichloropropene	<0.20		1.0	0.20	ug/L			12/09/14 02:22	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/09/14 02:22	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 02:22	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/09/14 02:22	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 02:22	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/09/14 02:22	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/09/14 02:22	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-GW-MW-2

Lab Sample ID: 500-88912-9

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/09/14 02:22	1
Benzene	<0.074		0.50	0.074	ug/L			12/09/14 02:22	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/09/14 02:22	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/09/14 02:22	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/09/14 02:22	1
Bromoform	<0.28		1.0	0.28	ug/L			12/09/14 02:22	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/09/14 02:22	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/09/14 02:22	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:22	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/09/14 02:22	1
Chloroform	<0.20		1.0	0.20	ug/L			12/09/14 02:22	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/09/14 02:22	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/09/14 02:22	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 02:22	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 02:22	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 02:22	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 02:22	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 02:22	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 02:22	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 02:22	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:22	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 02:22	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 02:22	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 02:22	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 02:22	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 02:22	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 02:22	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 02:22	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 02:22	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:22	1
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/09/14 02:22	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 02:22	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 02:22	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 02:22	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 02:22	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 02:22	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 02:22	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 02:22	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		75 - 125		12/09/14 02:22	1
4-Bromofluorobenzene (Surr)	90		75 - 120		12/09/14 02:22	1
Dibromofluoromethane	102		75 - 120		12/09/14 02:22	1
Toluene-d8 (Surr)	105		75 - 120		12/09/14 02:22	1

**Method: 6010B - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.6		10	2.6	ug/L		12/05/14 10:40	12/11/14 12:28	1
Barium	130	B	10	1.1	ug/L		12/05/14 10:40	12/11/14 12:28	1
Cadmium	1.0	J	2.0	0.26	ug/L		12/05/14 10:40	12/11/14 12:28	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-GW-MW-2**

**Lab Sample ID: 500-88912-9**  
 Matrix: Water

Date Collected: 12/03/14 10:25

Date Received: 12/04/14 09:40

**Method: 6010B - Metals (ICP) - Total Recoverable (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1.3	J	10	1.0	ug/L		12/05/14 10:40	12/11/14 12:28	1
Lead	3.9	J	5.0	2.3	ug/L		12/05/14 10:40	12/11/14 12:28	1
Selenium	<4.6		10	4.6	ug/L		12/05/14 10:40	12/11/14 12:28	1
Silver	<0.57		5.0	0.57	ug/L		12/05/14 10:40	12/11/14 12:28	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.072		0.20	0.072	ug/L		12/05/14 11:15	12/08/14 11:08	1

**Client Sample ID: PP-GW-MW-2-FD**

**Lab Sample ID: 500-88912-10**

Date Collected: 12/03/14 10:25

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L		12/09/14 02:47	12/09/14 02:47	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L		12/09/14 02:47	12/09/14 02:47	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L		12/09/14 02:47	12/09/14 02:47	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L		12/09/14 02:47	12/09/14 02:47	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L		12/09/14 02:47	12/09/14 02:47	1
Benzene	<0.074		0.50	0.074	ug/L		12/09/14 02:47	12/09/14 02:47	1
Bromobenzene	<0.25		1.0	0.25	ug/L		12/09/14 02:47	12/09/14 02:47	1
Bromochloromethane	<0.40		1.0	0.40	ug/L		12/09/14 02:47	12/09/14 02:47	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L		12/09/14 02:47	12/09/14 02:47	1
Bromoform	<0.28		1.0	0.28	ug/L		12/09/14 02:47	12/09/14 02:47	1
Bromoform	<0.31		1.0	0.31	ug/L		12/09/14 02:47	12/09/14 02:47	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L		12/09/14 02:47	12/09/14 02:47	1
Chlorobenzene	<0.14		1.0	0.14	ug/L		12/09/14 02:47	12/09/14 02:47	1
Chloroethane	<0.34		1.0	0.34	ug/L		12/09/14 02:47	12/09/14 02:47	1
Chloroform	<0.20		1.0	0.20	ug/L		12/09/14 02:47	12/09/14 02:47	1
Chloromethane	<0.18		1.0	0.18	ug/L		12/09/14 02:47	12/09/14 02:47	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L		12/09/14 02:47	12/09/14 02:47	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-GW-MW-2-FD

**Lab Sample ID:** 500-88912-10

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 02:47	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 02:47	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 02:47	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 02:47	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 02:47	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 02:47	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 02:47	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:47	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 02:47	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 02:47	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 02:47	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 02:47	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 02:47	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 02:47	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 02:47	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 02:47	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 02:47	1
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/09/14 02:47	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 02:47	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 02:47	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 02:47	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 02:47	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 02:47	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 02:47	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 02:47	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surrogate)	92		75 - 125		12/09/14 02:47	1
4-Bromofluorobenzene (Surrogate)	92		75 - 120		12/09/14 02:47	1
Dibromofluoromethane	105		75 - 120		12/09/14 02:47	1
Toluene-d8 (Surrogate)	106		75 - 120		12/09/14 02:47	1

**Method: 6010B - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.6		10	2.6	ug/L		12/05/14 10:40	12/11/14 12:59	1
Barium	120	B	10	1.1	ug/L		12/05/14 10:40	12/11/14 12:59	1
Cadmium	0.81	J	2.0	0.26	ug/L		12/05/14 10:40	12/11/14 12:59	1
Chromium	<1.0		10	1.0	ug/L		12/05/14 10:40	12/11/14 12:59	1
Lead	<2.3		5.0	2.3	ug/L		12/05/14 10:40	12/11/14 12:59	1
Selenium	<4.6		10	4.6	ug/L		12/05/14 10:40	12/11/14 12:59	1
Silver	<0.57		5.0	0.57	ug/L		12/05/14 10:40	12/11/14 12:59	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.072		0.20	0.072	ug/L		12/05/14 11:15	12/08/14 11:16	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

Client Sample ID: PP-GW-MW-3

Lab Sample ID: 500-88912-11

Date Collected: 12/03/14 13:15

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/09/14 03:12	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/09/14 03:12	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/09/14 03:12	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 03:12	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/09/14 03:12	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/09/14 03:12	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/09/14 03:12	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/09/14 03:12	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/09/14 03:12	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/09/14 03:12	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:12	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/09/14 03:12	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/09/14 03:12	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/09/14 03:12	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 03:12	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L			12/09/14 03:12	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/09/14 03:12	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:12	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/09/14 03:12	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:12	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/09/14 03:12	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/09/14 03:12	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/09/14 03:12	1
Benzene	<0.074		0.50	0.074	ug/L			12/09/14 03:12	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/09/14 03:12	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/09/14 03:12	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/09/14 03:12	1
Bromoform	<0.28		1.0	0.28	ug/L			12/09/14 03:12	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/09/14 03:12	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/09/14 03:12	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:12	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/09/14 03:12	1
Chloroform	<0.20		1.0	0.20	ug/L			12/09/14 03:12	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/09/14 03:12	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/09/14 03:12	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 03:12	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 03:12	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 03:12	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 03:12	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 03:12	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 03:12	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 03:12	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:12	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 03:12	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 03:12	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 03:12	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 03:12	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 03:12	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 03:12	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-GW-MW-3

**Lab Sample ID:** 500-88912-11

Date Collected: 12/03/14 13:15

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:12	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 03:12	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:12	1
Tetrachloroethene	0.55	J	1.0	0.17	ug/L			12/09/14 03:12	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 03:12	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 03:12	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 03:12	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 03:12	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 03:12	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 03:12	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 03:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					12/09/14 03:12	1
4-Bromofluorobenzene (Surr)	91		75 - 120					12/09/14 03:12	1
Dibromofluoromethane	103		75 - 120					12/09/14 03:12	1
Toluene-d8 (Surr)	104		75 - 120					12/09/14 03:12	1

**Method: 6010B - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.6		10	2.6	ug/L			12/05/14 10:40	1
Barium	6.4	J B	10	1.1	ug/L			12/11/14 13:03	1
Cadmium	<0.26		2.0	0.26	ug/L			12/11/14 13:03	1
Chromium	<1.0		10	1.0	ug/L			12/11/14 13:03	1
Lead	<2.3		5.0	2.3	ug/L			12/11/14 13:03	1
Selenium	<4.6		10	4.6	ug/L			12/11/14 13:03	1
Silver	<0.57		5.0	0.57	ug/L			12/11/14 13:03	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.072		0.20	0.072	ug/L			12/05/14 11:15	1

**Client Sample ID:** PP-GW-EB

**Lab Sample ID:** 500-88912-12

Date Collected: 12/03/14 12:46

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/09/14 03:38	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/09/14 03:38	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/09/14 03:38	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 03:38	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/09/14 03:38	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/09/14 03:38	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/09/14 03:38	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/09/14 03:38	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/09/14 03:38	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/09/14 03:38	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:38	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/09/14 03:38	1

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# Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-GW-EB

**Lab Sample ID:** 500-88912-12

Date Collected: 12/03/14 12:45

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/09/14 03:38	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/09/14 03:38	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 03:38	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L			12/09/14 03:38	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/09/14 03:38	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:38	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/09/14 03:38	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:38	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/09/14 03:38	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/09/14 03:38	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/09/14 03:38	1
Benzene	<0.074		0.50	0.074	ug/L			12/09/14 03:38	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/09/14 03:38	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/09/14 03:38	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/09/14 03:38	1
Bromoform	<0.28		1.0	0.28	ug/L			12/09/14 03:38	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/09/14 03:38	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/09/14 03:38	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:38	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/09/14 03:38	1
Chloroform	<0.20		1.0	0.20	ug/L			12/09/14 03:38	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/09/14 03:38	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/09/14 03:38	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 03:38	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 03:38	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 03:38	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 03:38	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 03:38	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 03:38	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 03:38	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:38	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 03:38	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 03:38	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 03:38	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 03:38	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 03:38	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 03:38	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 03:38	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 03:38	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 03:38	1
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/09/14 03:38	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 03:38	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 03:38	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 03:38	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 03:38	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 03:38	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 03:38	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 03:38	1

TestAmerica Chicago

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID: PP-GW-EB**

Date Collected: 12/03/14 12:45

Date Received: 12/04/14 09:40

**Lab Sample ID: 500-88912-12**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		75 - 125		12/09/14 03:38	1
4-Bromofluorobenzene (Surr)	90		75 - 120		12/09/14 03:38	1
Dibromofluoromethane	105		75 - 120		12/09/14 03:38	1
Toluene-d8 (Surr)	104		75 - 120		12/09/14 03:38	1

**Method: 6010B - Metals (ICP) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<2.6		10	2.6	ug/L		12/05/14 10:40	12/11/14 13:07	1
Barium	170	B	10	1.1	ug/L		12/05/14 10:40	12/11/14 13:07	1
Cadmium	1.1	J	2.0	0.26	ug/L		12/05/14 10:40	12/11/14 13:07	1
Chromium	<1.0		10	1.0	ug/L		12/05/14 10:40	12/11/14 13:07	1
Lead	<2.3		5.0	2.3	ug/L		12/05/14 10:40	12/11/14 13:07	1
Selenium	<4.6		10	4.6	ug/L		12/05/14 10:40	12/11/14 13:07	1
Silver	<0.57		5.0	0.57	ug/L		12/05/14 10:40	12/11/14 13:07	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.072		0.20	0.072	ug/L		12/05/14 11:15	12/08/14 11:20	1

**Client Sample ID: PP-GW-TB**

Date Collected: 12/03/14 00:00

Date Received: 12/04/14 09:40

**Lab Sample ID: 500-88912-13**

Matrix: Water

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/09/14 04:03	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/09/14 04:03	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/09/14 04:03	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 04:03	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/09/14 04:03	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/09/14 04:03	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/09/14 04:03	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/09/14 04:03	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/09/14 04:03	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/09/14 04:03	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 04:03	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/09/14 04:03	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/09/14 04:03	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/09/14 04:03	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/09/14 04:03	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L			12/09/14 04:03	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/09/14 04:03	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 04:03	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/09/14 04:03	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/09/14 04:03	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/09/14 04:03	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/09/14 04:03	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/09/14 04:03	1
Benzene	<0.074		0.50	0.074	ug/L			12/09/14 04:03	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/09/14 04:03	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/09/14 04:03	1

TestAmerica Chicago

# Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Client Sample ID:** PP-GW-TB

**Lab Sample ID:** 500-88912-13

Date Collected: 12/03/14 00:00

Matrix: Water

Date Received: 12/04/14 09:40

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/09/14 04:03	1
Bromoform	<0.28		1.0	0.28	ug/L			12/09/14 04:03	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/09/14 04:03	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/09/14 04:03	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/09/14 04:03	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/09/14 04:03	1
Chloroform	<0.20		1.0	0.20	ug/L			12/09/14 04:03	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/09/14 04:03	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/09/14 04:03	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/09/14 04:03	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/09/14 04:03	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/09/14 04:03	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/09/14 04:03	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/09/14 04:03	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/09/14 04:03	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/09/14 04:03	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 04:03	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/09/14 04:03	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/09/14 04:03	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/09/14 04:03	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 04:03	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/09/14 04:03	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/09/14 04:03	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/09/14 04:03	1
Styrene	<0.10		1.0	0.10	ug/L			12/09/14 04:03	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/09/14 04:03	1
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/09/14 04:03	1
Toluene	<0.11		0.50	0.11	ug/L			12/09/14 04:03	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/09/14 04:03	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/09/14 04:03	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/09/14 04:03	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/09/14 04:03	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/09/14 04:03	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/09/14 04:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		75 - 125		12/09/14 04:03	1
4-Bromofluorobenzene (Surr)	90		75 - 120		12/09/14 04:03	1
Dibromofluoromethane	105		75 - 120		12/09/14 04:03	1
Toluene-d8 (Surr)	106		75 - 120		12/09/14 04:03	1

TestAmerica Chicago

## Definitions/Glossary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Qualifiers

#### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

#### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery exceeds the control limits

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
V	Serial Dilution exceeds the control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

### GC/MS VOA

#### Prep Batch: 267175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	5035	
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	5035	
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	5035	
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	5035	
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	5035	
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	5035	
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	5035	
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	5035	
500-88912-7	PP-SB-TB	Total/NA	Solid	5035	
LB3 500-267175/19-A	Method Blank	Total/NA	Solid	5035	
LCS 500-267175/20-A	Lab Control Sample	Total/NA	Solid	5035	

#### Analysis Batch: 267450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB3 500-267175/19-A	Method Blank	Total/NA	Solid	8260B	267175
LCS 500-267175/20-A	Lab Control Sample	Total/NA	Solid	8260B	267175
LCS 500-267450/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 500-267450/6	Method Blank	Total/NA	Solid	8260B	

#### Analysis Batch: 267511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	8260B	
500-88912-9	PP-GW-MW-2	Total/NA	Water	8260B	
500-88912-9 MS	PP-GW-MW-2	Total/NA	Water	8260B	
500-88912-9 MSD	PP-GW-MW-2	Total/NA	Water	8260B	
500-88912-10	PP-GW-MW-2-FD	Total/NA	Water	8260B	
500-88912-11	PP-GW-MW-3	Total/NA	Water	8260B	
500-88912-12	PP-GW-EB	Total/NA	Water	8260B	
500-88912-13	PP-GW-TB	Total/NA	Water	8260B	
LCS 500-267511/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-267511/6	Method Blank	Total/NA	Water	8260B	

#### Analysis Batch: 267513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	8260B	267175
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	8260B	267175
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	8260B	267175
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	8260B	267175
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	8260B	267175
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	8260B	267175
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	8260B	267175
500-88912-7	PP-SB-TB	Total/NA	Solid	8260B	267175
LCS 500-267513/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 500-267513/6	Method Blank	Total/NA	Solid	8260B	

#### Analysis Batch: 267617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	8260B	267175
LCS 500-267617/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 500-267617/6	Method Blank	Total/NA	Solid	8260B	

TestAmerica Chicago

## QC Association Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### GC/MS Semi VOA

#### Prep Batch: 267118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	3510C	
LCS 500-267118/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-267118/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 500-267118/1-A	Method Blank	Total/NA	Water	3510C	

#### Prep Batch: 267343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	3541	
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	3541	
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	3541	
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	3541	
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	3541	
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	
LCS 500-267343/2-A	Lab Control Sample	Total/NA	Solid	3541	
MB 500-267343/1-A	Method Blank	Total/NA	Solid	3541	

#### Analysis Batch: 267764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	8270D	267343
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	8270D	267343
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	8270D	267343
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	8270D	267343
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	8270D	267343
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	8270D	267343
LCS 500-267343/2-A	Lab Control Sample	Total/NA	Solid	8270D	267343
MB 500-267343/1-A	Method Blank	Total/NA	Solid	8270D	267343

#### Analysis Batch: 267877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	8270D	267343
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	8270D	267343

#### Analysis Batch: 267967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	8270D	267118
LCS 500-267118/2-A	Lab Control Sample	Total/NA	Water	8270D	267118
LCSD 500-267118/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	267118
MB 500-267118/1-A	Method Blank	Total/NA	Water	8270D	267118

### GC Semi VOA

#### Prep Batch: 267254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	3510C	
LCS 500-267254/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 500-267254/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 500-267254/1-A	Method Blank	Total/NA	Water	3510C	

TestAmerica Chicago

## QC Association Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### GC Semi VOA (Continued)

#### Analysis Batch: 267308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	8082	267254
LCS 500-267254/4-A	Lab Control Sample	Total/NA	Water	8082	267254
LCSD 500-267254/5-A	Lab Control Sample Dup	Total/NA	Water	8082	267254
MB 500-267254/1-A	Method Blank	Total/NA	Water	8082	267254

#### Analysis Batch: 267318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	8082	267588
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	8082	267588
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	8082	267588
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	8082	267588
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	8082	267588
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	8082	267588
LCS 500-267588/2-A	Lab Control Sample	Total/NA	Solid	8082	267588
MB 500-267588/1-A	Method Blank	Total/NA	Solid	8082	267588

#### Prep Batch: 267588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	3541	267588
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	3541	267588
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	3541	267588
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	267588
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	267588
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	3541	267588
LCS 500-267588/2-A	Lab Control Sample	Total/NA	Solid	3541	267588
MB 500-267588/1-A	Method Blank	Total/NA	Solid	3541	267588

### Metals

#### Prep Batch: 267229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	7470A	267229
500-88912-9	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 DU	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 MS	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 MSD	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-10	PP-GW-MW-2-FD	Total/NA	Water	7470A	267229
500-88912-11	PP-GW-MW-3	Total/NA	Water	7470A	267229
500-88912-12	PP-GW-EB	Total/NA	Water	7470A	267229
LCS 500-267229/13-A	Lab Control Sample	Total/NA	Water	7470A	267229
MB 500-267229/12-A	Method Blank	Total/NA	Water	7470A	267229

#### Prep Batch: 267263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total Recoverable	Water	3005A	267263
500-88912-9	PP-GW-MW-2	Total Recoverable	Water	3005A	267263
500-88912-9 DU	PP-GW-MW-2	Total Recoverable	Water	3005A	267263
500-88912-9 MS	PP-GW-MW-2	Total Recoverable	Water	3005A	267263
500-88912-9 MSD	PP-GW-MW-2	Total Recoverable	Water	3005A	267263
500-88912-10	PP-GW-MW-2-FD	Total Recoverable	Water	3005A	267263

TestAmerica Chicago

## QC Association Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Metals (Continued)

#### Prep Batch: 267263 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-11	PP-GW-MW-3	Total Recoverable	Water	3005A	
500-88912-12	PP-GW-EB	Total Recoverable	Water	3005A	
LCS 500-267263/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 500-267263/1-A	Method Blank	Total Recoverable	Water	3005A	

#### Analysis Batch: 267546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total/NA	Water	7470A	267229
500-88912-9	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 DU	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 MS	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-9 MSD	PP-GW-MW-2	Total/NA	Water	7470A	267229
500-88912-10	PP-GW-MW-2-FD	Total/NA	Water	7470A	267229
500-88912-11	PP-GW-MW-3	Total/NA	Water	7470A	267229
500-88912-12	PP-GW-EB	Total/NA	Water	7470A	267229
LCS 500-267229/13-A	Lab Control Sample	Total/NA	Water	7470A	267229
MB 500-267229/12-A	Method Blank	Total/NA	Water	7470A	267229

#### Prep Batch: 267576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	3050B	
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	3050B	
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	3050B	
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	3050B	
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	3050B	
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	3050B	
500-88912-6 DU	PP-SB-GP-4, 8-10'	Total/NA	Solid	3050B	
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	3050B	
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	3050B	
LCS 500-267576/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 500-267576/1-A	Method Blank	Total/NA	Solid	3050B	

#### Prep Batch: 267712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	7471A	
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	7471A	
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	7471A	
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	7471A	
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	7471A	
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	
500-88912-6 DU	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	
LCS 500-267712/13-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 500-267712/12-A	Method Blank	Total/NA	Solid	7471A	

#### Analysis Batch: 267827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	6010B	267576
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	6010B	267576
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	6010B	267576

TestAmerica Chicago

## QC Association Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Metals (Continued)

#### Analysis Batch: 267827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	6010B	267576
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	6010B	267576
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	6010B	267576
500-88912-6 DU	PP-SB-GP-4, 8-10'	Total/NA	Solid	6010B	267576
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	6010B	267576
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	6010B	267576
LCS 500-267576/2-A	Lab Control Sample	Total/NA	Solid	6010B	267576
MB 500-267576/1-A	Method Blank	Total/NA	Solid	6010B	267576

#### Analysis Batch: 267909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	7471A	267712
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	7471A	267712
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	7471A	267712
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	7471A	267712
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	7471A	267712
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	267712
500-88912-6 DU	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	267712
500-88912-6 MS	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	267712
500-88912-6 MSD	PP-SB-GP-4, 8-10'	Total/NA	Solid	7471A	267712
LCS 500-267712/13-A	Lab Control Sample	Total/NA	Solid	7471A	267712
MB 500-267712/12-A	Method Blank	Total/NA	Solid	7471A	267712

#### Analysis Batch: 268122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-8	PP-SB-EB	Total Recoverable	Water	6010B	267263
500-88912-9	PP-GW-MW-2	Total Recoverable	Water	6010B	267263
500-88912-9 DU	PP-GW-MW-2	Total Recoverable	Water	6010B	267263
500-88912-9 MS	PP-GW-MW-2	Total Recoverable	Water	6010B	267263
500-88912-9 MSD	PP-GW-MW-2	Total Recoverable	Water	6010B	267263
500-88912-10	PP-GW-MW-2-FD	Total Recoverable	Water	6010B	267263
500-88912-11	PP-GW-MW-3	Total Recoverable	Water	6010B	267263
500-88912-12	PP-GW-EB	Total Recoverable	Water	6010B	267263
LCS 500-267263/2-A	Lab Control Sample	Total Recoverable	Water	6010B	267263
MB 500-267263/1-A	Method Blank	Total Recoverable	Water	6010B	267263

#### Analysis Batch: 268133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	6010B	267576
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	6010B	267576

### General Chemistry

#### Analysis Batch: 267555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-1	PP-SB-GP-1, 3-4'	Total/NA	Solid	Moisture	
500-88912-1 DU	PP-SB-GP-1, 3-4'	Total/NA	Solid	Moisture	
500-88912-2	PP-SB-GP-1, 3-4' FD	Total/NA	Solid	Moisture	
500-88912-3	PP-SB-GP-2, 1-2'	Total/NA	Solid	Moisture	
500-88912-4	PP-SB-GP-3, 1-2'	Total/NA	Solid	Moisture	

TestAmerica Chicago

## QC Association Summary

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
SDG: 25212326.00

### General Chemistry (Continued)

#### Analysis Batch: 267555 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-5	PP-SB-GP-4, 4-8'	Total/NA	Solid	Moisture	
500-88912-6	PP-SB-GP-4, 8-10'	Total/NA	Solid	Moisture	

## Surrogate Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	BFB (75-120)	DBFM (75-120)	TOL (75-120)
500-88912-1	PP-SB-GP-1, 3-4'	93	90	105	106
500-88912-2	PP-SB-GP-1, 3-4' FD	93	91	104	106
500-88912-3	PP-SB-GP-2, 1-2'	93	94	104	104
500-88912-4	PP-SB-GP-3, 1-2'	95	92	104	105
500-88912-5	PP-SB-GP-4, 4-8'	93	93	104	103
500-88912-6	PP-SB-GP-4, 8-10'	91	91	101	105
500-88912-6 MS	PP-SB-GP-4, 8-10'	88	91	102	104
500-88912-6 MSD	PP-SB-GP-4, 8-10'	90	92	103	104
500-88912-7	PP-SB-TB	92	91	105	105
LBS 500-267175/19-A	Method Blank	92	89	103	104
LCS 500-267175/20-A	Lab Control Sample	90	95	100	103
LCS 500-267450/4	Lab Control Sample	87	95	101	103
LCS 500-267513/4	Lab Control Sample	92	93	102	104
LCS 500-267617/4	Lab Control Sample	89	95	99	104
MB 500-267450/6	Method Blank	94	93	106	105
MB 500-267513/6	Method Blank	93	91	105	105
MB 500-267617/6	Method Blank	90	90	103	104

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (75-125)	BFB (75-120)	DBFM (75-120)	TOL (75-120)
500-88912-8	PP-SB-EB	90	91	105	105
500-88912-9	PP-GW-MW-2	89	90	102	105
500-88912-9 MS	PP-GW-MW-2	90	94	102	104
500-88912-9 MSD	PP-GW-MW-2	88	94	101	103
500-88912-10	PP-GW-MW-2-FD	92	92	105	106
500-88912-11	PP-GW-MW-3	90	91	103	104
500-88912-12	PP-GW-EB	91	90	105	104
500-88912-13	PP-GW-TB	93	90	105	106
LCS 500-267511/4	Lab Control Sample	92	93	102	104
MB 500-267511/6	Method Blank	93	91	105	105

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

TOL = Toluene-d8 (Surr)

TestAmerica Chicago

## Surrogate Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (25-119)	NBZ (25-115)	TPH (36-134)
500-88912-1	PP-SB-GP-1, 3-4'	57	52	79
500-88912-2	PP-SB-GP-1, 3-4' FD	51	49	89
500-88912-3	PP-SB-GP-2, 1-2'	56	45	60
500-88912-4	PP-SB-GP-3, 1-2'	46	52	64
500-88912-5	PP-SB-GP-4, 4-8'	51	37	96
500-88912-6	PP-SB-GP-4, 8-10'	48	46	72
500-88912-6 MS	PP-SB-GP-4, 8-10'	38	37	81
500-88912-6 MSD	PP-SB-GP-4, 8-10'	40	38	49
LCS 500-267343/2-A	Lab Control Sample	75	65	68
MB 500-267343/1-A	Method Blank	64	64	95

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (41-132)	NBZ (47-134)	TPH (59-150)
500-88912-8	PP-SB-EB	91	92	97
LCS 500-267118/2-A	Lab Control Sample	91	92	97
LCSD 500-267118/3-A	Lab Control Sample Dup	82	87	89
MB 500-267118/1-A	Method Blank	87	85	97

#### Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCB1 (48-142)	TCX1 (50-116)
500-88912-1	PP-SB-GP-1, 3-4'	100	80
500-88912-2	PP-SB-GP-1, 3-4' FD	90	83
500-88912-3	PP-SB-GP-2, 1-2'	84	78
500-88912-6	PP-SB-GP-4, 8-10'	102	73
500-88912-6 MS	PP-SB-GP-4, 8-10'	89	62
500-88912-6 MSD	PP-SB-GP-4, 8-10'	98	71
LCS 500-267588/2-A	Lab Control Sample	91	78
MB 500-267588/1-A	Method Blank	93	81

#### Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

TestAmerica Chicago

## Surrogate Summary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX2 (50-120)	DCB2 (29-126)
500-88912-8	PP-SB-EB	91	60
LCS 500-267254/4-A	Lab Control Sample	86	100
LCSD 500-267254/5-A	Lab Control Sample Dup	94	102
MB 500-267254/1-A	Method Blank	85	73

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS)**
**Lab Sample ID: LB3 500-267175/19-A****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	LB3	LB3	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<17				100	17	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1,1-Trichloroethane	<10				50	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1,2,2-Tetrachloroethane	<12				50	12	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1,2-Trichloroethane	<14				50	14	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1-Dichloroethane	<9.3				50	9.3	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1-Dichloroethene	<15				50	15	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,1-Dichloropropene	<17				50	17	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2,3-Trichlorobenzene	<18				100	18	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2,3-Trichloropropane	<29				100	29	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2,4-Trichlorobenzene	<19				100	19	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2,4-Trimethylbenzene	<11				100	11	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2-Dibromo-3-Chloropropane	<44				100	44	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2-Dibromoethane	<16				100	16	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2-Dichlorobenzene	<10				100	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2-Dichloroethane	<14				50	14	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,2-Dichloropropane	<9.8				50	9.8	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,3,5-Trimethylbenzene	<10				100	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,3-Dichlorobenzene	<13				100	13	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,3-Dichloropropene	<6.7				50	6.7	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
1,4-Dichlorobenzene	<8.7				100	8.7	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
2,2-Dichloropropane	<16				50	16	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
2-Chlorotoluene	<10				50	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
4-Chlorotoluene	<9.9				50	9.9	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Benzene	<3.7				13	3.7	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Bromobenzene	<21				100	21	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Bromochloromethane	<19				100	19	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Bromodichloromethane	<17				100	17	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Bromoform	<22				100	22	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Bromomethane	<34				100	34	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Carbon tetrachloride	<13				50	13	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Chlorobenzene	<7.2				50	7.2	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Chloroethane	<22				100	22	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Chloroform	<10				50	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Chloromethane	<23				100	23	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
cis-1,2-Dichloroethene	<6.2				50	6.2	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
cis-1,3-Dichloropropene	<8.9				50	8.9	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Dibromochloromethane	<17				100	17	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Dibromomethane	<24				100	24	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Dichlorodifluoromethane	<26				100	26	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Ethylbenzene	<6.3				13	6.3	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Hexachlorobutadiene	<17				100	17	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Isopropyl ether	<7.4				100	7.4	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Isopropylbenzene	<13				100	13	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Methyl tert-butyl ether	<22				100	22	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Methylene Chloride	<34				250	34	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Naphthalene	<25				100	25	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
n-Butylbenzene	<6.5				50	6.5	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
N-Propylbenzene	<8.8				100	8.8	ug/Kg		12/05/14 06:00	12/08/14 16:33	50

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: LB3 500-267175/19-A****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	LB3		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
p-Isopropyltoluene	<9.3		100	9.3	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
sec-Butylbenzene	<7.7		50	7.7	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Styrene	<4.9		50	4.9	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
tert-Butylbenzene	<6.8		50	6.8	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Tetrachloroethene	<8.4		50	8.4	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Toluene	<5.8		13	5.8	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
trans-1,2-Dichloroethene	<13		50	13	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
trans-1,3-Dichloropropene	<10		50	10	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Trichloroethene	<9.3		25	9.3	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Trichlorofluoromethane	<21		100	21	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Vinyl chloride	<5.2		13	5.2	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
Xylenes, Total	<3.4		25	3.4	ug/Kg		12/05/14 06:00	12/08/14 16:33	50
LB3		LB3		Limits		Prepared		Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	92			75 - 125			12/05/14 06:00	12/08/14 16:33	50
4-BromoFluorobenzene (Surr)	89			75 - 120			12/05/14 06:00	12/08/14 16:33	50
Dibromofluoromethane	103			75 - 120			12/05/14 06:00	12/08/14 16:33	50
Toluene-d8 (Surr)	104			75 - 120			12/05/14 06:00	12/08/14 16:33	50

**Lab Sample ID: LCS 500-267175/20-A****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	2500	2530		ug/Kg		101	75 - 122
1,1,1-Trichloroethane	2500	2210		ug/Kg		88	72 - 130
1,1,2,2-Tetrachloroethane	2500	2340		ug/Kg		94	72 - 130
1,1,2-Trichloroethane	2500	2390		ug/Kg		96	75 - 120
1,1-Dichloroethane	2500	2320		ug/Kg		93	75 - 120
1,1-Dichloroethene	2500	2240		ug/Kg		89	69 - 120
1,1-Dichloropropene	2500	2300		ug/Kg		92	75 - 130
1,2,3-Trichlorobenzene	2500	2520		ug/Kg		101	69 - 131
1,2,3-Trichloropropane	2500	2420		ug/Kg		97	65 - 132
1,2,4-Trichlorobenzene	2500	2400		ug/Kg		96	73 - 130
1,2,4-Trimethylbenzene	2500	2350		ug/Kg		94	75 - 121
1,2-Dibromo-3-Chloropropane	2500	2200		ug/Kg		88	62 - 130
1,2-Dibromoethane	2500	2460		ug/Kg		99	78 - 122
1,2-Dichlorobenzene	2500	2500		ug/Kg		100	75 - 120
1,2-Dichloroethane	2500	2080		ug/Kg		83	69 - 130
1,2-Dichloropropane	2500	2450		ug/Kg		98	75 - 120
1,3,5-Trimethylbenzene	2500	2360		ug/Kg		95	75 - 121
1,3-Dichlorobenzene	2500	2480		ug/Kg		99	75 - 120
1,3-Dichloropropane	2500	2410		ug/Kg		96	77 - 124
1,4-Dichlorobenzene	2500	2450		ug/Kg		98	75 - 120
2,2-Dichloropropane	2500	2000		ug/Kg		80	65 - 132
2-Chlorotoluene	2500	2290		ug/Kg		92	75 - 120
4-Chlorotoluene	2500	2270		ug/Kg		91	75 - 120
Benzene	2500	2380		ug/Kg		95	75 - 120

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## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-267175/20-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267450

Prep Batch: 267175

Analyte	Spike	LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Bromobenzene	2500	2510		ug/Kg	101	75 - 120	
Bromochloromethane	2500	2530		ug/Kg	101	76 - 120	
Bromodichloromethane	2500	2290		ug/Kg	92	77 - 121	
Bromoform	2500	2670		ug/Kg	107	68 - 126	
Bromomethane	2500	1330		ug/Kg	53	45 - 169	
Carbon tetrachloride	2500	2290		ug/Kg	92	70 - 130	
Chlorobenzene	2500	2490		ug/Kg	99	75 - 120	
Chloroethane	2500	1720		ug/Kg	69	58 - 147	
Chloroform	2500	2230		ug/Kg	89	76 - 120	
Chloromethane	2500	1410 *		ug/Kg	56	63 - 133	
cis-1,2-Dichloroethene	2500	2390		ug/Kg	96	75 - 120	
cis-1,3-Dichloropropene	2500	2270		ug/Kg	91	78 - 130	
Dibromochloromethane	2500	2560		ug/Kg	102	71 - 126	
Dibromomethane	2500	2300		ug/Kg	92	75 - 120	
Dichlorodifluoromethane	2500	932 *		ug/Kg	37	41 - 146	
Ethylbenzene	2500	2450		ug/Kg	98	75 - 120	
Hexachlorobutadiene	2500	2510		ug/Kg	100	71 - 131	
Isopropylbenzene	2500	2390		ug/Kg	96	75 - 121	
Methyl tert-butyl ether	2500	2110		ug/Kg	84	75 - 130	
Methylene Chloride	2500	2250		ug/Kg	90	73 - 130	
Naphthalene	2500	2310		ug/Kg	93	69 - 135	
n-Butylbenzene	2500	2300		ug/Kg	92	75 - 121	
N-Propylbenzene	2500	2350		ug/Kg	94	75 - 120	
p-Isopropyltoluene	2500	2410		ug/Kg	96	75 - 121	
sec-Butylbenzene	2500	2380		ug/Kg	95	75 - 120	
Styrene	2500	2480		ug/Kg	99	75 - 120	
tert-Butylbenzene	2500	2420		ug/Kg	97	75 - 123	
Tetrachloroethene	2500	2620		ug/Kg	105	75 - 120	
Toluene	2500	2410		ug/Kg	96	75 - 120	
trans-1,2-Dichloroethene	2500	2330		ug/Kg	93	77 - 120	
trans-1,3-Dichloropropene	2500	2230		ug/Kg	89	74 - 130	
Trichloroethene	2500	2570		ug/Kg	103	75 - 120	
Trichlorofluoromethane	2500	1930		ug/Kg	77	71 - 130	
Vinyl chloride	2500	1690 *		ug/Kg	68	72 - 123	
Xylenes, Total	5000	4750		ug/Kg	95	75 - 120	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	90		75 - 125
4-Bromofluorobenzene (Surr)	95		75 - 120
Dibromofluoromethane	100		75 - 120
Toluene-d8 (Surr)	103		75 - 120

Lab Sample ID: 500-88912-6 MS

Client Sample ID: PP-SB-GP-4, 8-10'

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267513

Prep Batch: 267175

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	<23		3270	3310		ug/Kg	*	101	75 - 122

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-88912-6 MS

Matrix: Solid

Analysis Batch: 267513

Client Sample ID: PP-SB-GP-4, 8-10'

Prep Type: Total/NA

Prep Batch: 267175

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1,1,1-Trichloroethane	<13		3270	2980		ug/Kg	*	91	72 - 130
1,1,2,2-Tetrachloroethane	<15		3270	3130		ug/Kg	*	96	72 - 130
1,1,2-Trichloroethane	<18		3270	3110		ug/Kg	*	95	75 - 120
1,1-Dichloroethane	<12		3270	3130		ug/Kg	*	96	75 - 120
1,1-Dichloroethene	<20		3270	3080		ug/Kg	*	94	69 - 120
1,1-Dichloropropene	<23		3270	3110		ug/Kg	*	95	75 - 130
1,2,3-Trichlorobenzene	<23		3270	3280		ug/Kg	*	101	69 - 131
1,2,3-Trichloropropane	<38		3270	3200		ug/Kg	*	98	65 - 132
1,2,4-Trichlorobenzene	<25		3270	3120		ug/Kg	*	96	73 - 130
1,2,4-Trimethylbenzene	33		3270	3130		ug/Kg	*	96	75 - 121
1,2-Dibromo-3-Chloropropane	<57		3270	2930		ug/Kg	*	90	62 - 130
1,2-Dibromoethane	<21		3270	3230		ug/Kg	*	99	78 - 122
1,2-Dichlorobenzene	<14		3270	3320		ug/Kg	*	102	75 - 120
1,2-Dichloroethane	<19		3270	2750		ug/Kg	*	84	69 - 130
1,2-Dichloropropane	<13		3270	3320		ug/Kg	*	102	75 - 120
1,3,5-Trimethylbenzene	<14		3270	3190		ug/Kg	*	98	75 - 121
1,3-Dichlorobenzene	<17		3270	3300		ug/Kg	*	101	75 - 120
1,3-Dichloropropane	<8.8		3270	3130		ug/Kg	*	96	77 - 124
1,4-Dichlorobenzene	<11		3270	3270		ug/Kg	*	100	75 - 120
2,2-Dichloropropane	<21		3270	2650		ug/Kg	*	81	65 - 132
2-Chlorotoluene	<14		3270	3070		ug/Kg	*	94	75 - 120
4-Chlorotoluene	<13		3270	3040		ug/Kg	*	93	75 - 120
Benzene	<4.9		3270	3200		ug/Kg	*	98	75 - 120
Bromobenzene	<28		3270	3370		ug/Kg	*	103	75 - 120
Bromochloromethane	<25		3270	3410		ug/Kg	*	104	76 - 120
Bromodichloromethane	<22		3270	3020		ug/Kg	*	93	77 - 121
Bromoform	<29		3270	3420		ug/Kg	*	105	68 - 126
Bromomethane	<45		3270	2500		ug/Kg	*	76	45 - 169
Carbon tetrachloride	<17		3270	3090		ug/Kg	*	95	70 - 130
Chlorobenzene	<9.4		3270	3260		ug/Kg	*	100	75 - 120
Chloroethane	<29		3270	2730		ug/Kg	*	84	58 - 147
Chloroform	<14		3270	2980		ug/Kg	*	91	76 - 120
Chloromethane	<30 *		3270	3090		ug/Kg	*	95	63 - 133
cis-1,2-Dichloroethene	<8.1		3270	3280		ug/Kg	*	100	75 - 120
cis-1,3-Dichloropropene	<12		3270	3020		ug/Kg	*	92	78 - 130
Dibromochloromethane	<23		3270	3350		ug/Kg	*	103	71 - 126
Dibromomethane	<32		3270	3100		ug/Kg	*	95	75 - 120
Dichlorodifluoromethane	<34 *		3270	3090		ug/Kg	*	95	41 - 146
Ethylbenzene	<8.3		3270	3230		ug/Kg	*	99	75 - 120
Hexachlorobutadiene	<23		3270	3420		ug/Kg	*	105	71 - 131
Isopropylbenzene	<17		3270	3270		ug/Kg	*	100	75 - 121
Methyl tert-butyl ether	<28		3270	2800		ug/Kg	*	86	75 - 130
Methylene Chloride	<45		3270	3070		ug/Kg	*	94	73 - 130
Naphthalene	130 J		3270	3160		ug/Kg	*	93	69 - 135
n-Butylbenzene	<8.5		3270	3020		ug/Kg	*	93	75 - 121
N-Propylbenzene	13		3270	3190		ug/Kg	*	98	75 - 120
p-Isopropyltoluene	<12		3270	3260		ug/Kg	*	100	75 - 121
sec-Butylbenzene	<10		3270	3260		ug/Kg	*	100	75 - 120

TestAmerica Chicago

# QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: 500-88912-6 MS****Matrix: Solid****Analysis Batch: 267513****Client Sample ID: PP-SB-GP-4, 8-10'****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.			
	Result	Qualifier	Added	Result	Qualifier							
Styrene	<6.5		3270	3270		ug/Kg	*	100	75 - 120			
tert-Butylbenzene	<9.0		3270	3320		ug/Kg	*	102	75 - 123			
Tetrachloroethene	<11		3270	3440		ug/Kg	*	105	75 - 120			
Toluene	<7.6		3270	3220		ug/Kg	*	99	75 - 120			
trans-1,2-Dichloroethene	<16		3270	3240		ug/Kg	*	99	77 - 120			
trans-1,3-Dichloropropene	<14		3270	2880		ug/Kg	*	88	74 - 130			
Trichloroethene	<12		3270	3420		ug/Kg	*	105	75 - 120			
Trichlorofluoromethane	<27		3270	2860		ug/Kg	*	87	71 - 130			
Vinyl chloride	<6.9 *		3270	3060		ug/Kg	*	94	72 - 123			
Xylenes, Total	<4.5		6530	6250		ug/Kg	*	96	75 - 120			
<hr/>												
Surrogate	MS		MS		Limits	D	%Rec	%Rec.	RPD			
	%Recovery	Qualifier										
1,2-Dichloroethane-d4 (Surr)	88				75 - 125							
4-Bromofluorobenzene (Surr)	91				75 - 120							
Dibromofluoromethane	102				75 - 120							
Toluene-d8 (Surr)	104				75 - 120							

**Lab Sample ID: 500-88912-6 MSD****Matrix: Solid****Analysis Batch: 267513****Client Sample ID: PP-SB-GP-4, 8-10'****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<23		3280	3310		ug/Kg	*	101	75 - 122	0	30
1,1,1-Trichloroethane	<13		3280	2960		ug/Kg	*	90	72 - 130	1	30
1,1,2,2-Tetrachloroethane	<15		3280	3170		ug/Kg	*	97	72 - 130	1	30
1,1,2-Trichloroethane	<18		3280	3140		ug/Kg	*	96	75 - 120	1	30
1,1-Dichloroethane	<12		3280	3120		ug/Kg	*	95	75 - 120	0	30
1,1-Dichloroethene	<20		3280	3100		ug/Kg	*	94	69 - 120	0	30
1,1-Dichloropropene	<23		3280	3070		ug/Kg	*	93	75 - 130	1	30
1,2,3-Trichlorobenzene	<23		3280	3320		ug/Kg	*	101	69 - 131	1	30
1,2,3-Trichloropropane	<38		3280	3260		ug/Kg	*	99	65 - 132	2	30
1,2,4-Trichlorobenzene	<25		3280	3040		ug/Kg	*	92	73 - 130	3	30
1,2,4-Trimethylbenzene	33		3280	3120		ug/Kg	*	95	75 - 121	0	30
1,2-Dibromo-3-Chloropropane	<57		3280	3010		ug/Kg	*	92	62 - 130	3	30
1,2-Dibromoethane	<21		3280	3220		ug/Kg	*	98	78 - 122	0	30
1,2-Dichlorobenzene	<14		3280	3320		ug/Kg	*	101	75 - 120	0	30
1,2-Dichloroethane	<19		3280	2820		ug/Kg	*	86	69 - 130	3	30
1,2-Dichloropropene	<13		3280	3330		ug/Kg	*	101	75 - 120	0	30
1,3,5-Trimethylbenzene	<14		3280	3180		ug/Kg	*	97	75 - 121	0	30
1,3-Dichlorobenzene	<17		3280	3240		ug/Kg	*	99	75 - 120	2	30
1,3-Dichloropropane	<8.8		3280	3130		ug/Kg	*	95	77 - 124	0	30
1,4-Dichlorobenzene	<11		3280	3240		ug/Kg	*	99	75 - 120	1	30
2,2-Dichloropropane	<21		3280	2650		ug/Kg	*	81	65 - 132	0	30
2-Chlorotoluene	<14		3280	3040		ug/Kg	*	93	75 - 120	1	30
4-Chlorotoluene	<13		3280	3010		ug/Kg	*	92	75 - 120	1	30
Benzene	<4.9		3280	3190		ug/Kg	*	97	75 - 120	0	30
Bromobenzene	<28		3280	3410		ug/Kg	*	104	75 - 120	1	30
Bromochloromethane	<25		3280	3430		ug/Kg	*	104	76 - 120	0	30

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: 500-88912-6 MSD****Matrix: Solid****Analysis Batch: 267513****Client Sample ID: PP-SB-GP-4, 8-10'****Prep Type: Total/NA****Prep Batch: 267175**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Bromodichloromethane	<22		3280	3020		ug/Kg	*	92	77 - 121	0	30	
Bromoform	<29		3280	3510		ug/Kg	*	107	68 - 126	3	30	
Bromomethane	<45		3280	2630		ug/Kg	*	80	45 - 169	5	30	
Carbon tetrachloride	<17		3280	3100		ug/Kg	*	94	70 - 130	0	30	
Chlorobenzene	<9.4		3280	3250		ug/Kg	*	99	75 - 120	0	30	
Chloroethane	<29		3280	2810		ug/Kg	*	85	58 - 147	3	30	
Chloroform	<14		3280	3000		ug/Kg	*	91	76 - 120	0	30	
Chloromethane	<30 *		3280	3100		ug/Kg	*	94	63 - 133	0	30	
cis-1,2-Dichloroethene	<8.1		3280	3270		ug/Kg	*	100	75 - 120	0	30	
cis-1,3-Dichloropropene	<12		3280	3030		ug/Kg	*	92	78 - 130	0	30	
Dibromochloromethane	<23		3280	3390		ug/Kg	*	103	71 - 126	1	30	
Dibromomethane	<32		3280	3110		ug/Kg	*	95	75 - 120	0	30	
Dichlorodifluoromethane	<34 *		3280	3180		ug/Kg	*	97	41 - 146	3	30	
Ethylbenzene	<8.3		3280	3170		ug/Kg	*	97	75 - 120	2	30	
Hexachlorobutadiene	<23		3280	3380		ug/Kg	*	103	71 - 131	1	30	
Isopropylbenzene	<17		3280	3220		ug/Kg	*	98	75 - 121	2	30	
Methyl tert-butyl ether	<28		3280	2800		ug/Kg	*	85	75 - 130	0	30	
Methylene Chloride	<45		3280	3080		ug/Kg	*	94	73 - 130	0	30	
Naphthalene	130 J		3280	3220		ug/Kg	*	94	69 - 135	2	30	
n-Butylbenzene	<8.5		3280	2890		ug/Kg	*	88	75 - 121	4	30	
N-Propylbenzene	13		3280	3090		ug/Kg	*	94	75 - 120	3	30	
p-Isopropyltoluene	<12		3280	3220		ug/Kg	*	98	75 - 121	1	30	
sec-Butylbenzene	<10		3280	3240		ug/Kg	*	99	75 - 120	1	30	
Styrene	<6.5		3280	3240		ug/Kg	*	99	75 - 120	1	30	
tert-Butylbenzene	<9.0		3280	3310		ug/Kg	*	101	75 - 123	0	30	
Tetrachloroethene	<11		3280	3380		ug/Kg	*	103	75 - 120	2	30	
Toluene	<7.6		3280	3230		ug/Kg	*	98	75 - 120	0	30	
trans-1,2-Dichloroethene	<16		3280	3170		ug/Kg	*	97	77 - 120	2	30	
trans-1,3-Dichloropropene	<14		3280	2880		ug/Kg	*	88	74 - 130	0	30	
Trichloroethene	<12		3280	3420		ug/Kg	*	104	75 - 120	0	30	
Trichlorofluoromethane	<27		3280	2900		ug/Kg	*	88	71 - 130	2	30	
Vinyl chloride	<6.9 *		3280	3090		ug/Kg	*	94	72 - 123	1	30	
Xylenes, Total	<4.5		6570	6150		ug/Kg	*	94	75 - 120	2	30	

**MSD MSD**

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		75 - 125
4-Bromofluorobenzene (Surr)	92		75 - 120
Dibromofluoromethane	103		75 - 120
Toluene-d8 (Surr)	104		75 - 120

**Lab Sample ID: MB 500-267450/6****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.35		2.0	0.35	ug/Kg			12/08/14 09:52	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/Kg			12/08/14 09:52	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/Kg			12/08/14 09:52	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267450/6****Client Sample ID: Method Blank****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 267450**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/Kg			12/08/14 09:52	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/Kg			12/08/14 09:52	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/Kg			12/08/14 09:52	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/Kg			12/08/14 09:52	1
1,2,3-Trichlorobenzene	<0.35		2.0	0.35	ug/Kg			12/08/14 09:52	1
1,2,3-Trichloropropane	<0.57		2.0	0.57	ug/Kg			12/08/14 09:52	1
1,2,4-Trichlorobenzene	<0.38		2.0	0.38	ug/Kg			12/08/14 09:52	1
1,2,4-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 09:52	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/Kg			12/08/14 09:52	1
1,2-Dibromoethane	<0.31		2.0	0.31	ug/Kg			12/08/14 09:52	1
1,2-Dichlorobenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 09:52	1
1,2-Dichloroethane	<0.29		1.0	0.29	ug/Kg			12/08/14 09:52	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/Kg			12/08/14 09:52	1
1,3,5-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 09:52	1
1,3-Dichlorobenzene	<0.26		2.0	0.26	ug/Kg			12/08/14 09:52	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/Kg			12/08/14 09:52	1
1,4-Dichlorobenzene	<0.17		2.0	0.17	ug/Kg			12/08/14 09:52	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/Kg			12/08/14 09:52	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/Kg			12/08/14 09:52	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/Kg			12/08/14 09:52	1
Benzene	<0.074		0.25	0.074	ug/Kg			12/08/14 09:52	1
Bromobenzene	<0.43		2.0	0.43	ug/Kg			12/08/14 09:52	1
Bromochloromethane	<0.38		2.0	0.38	ug/Kg			12/08/14 09:52	1
Bromodichloromethane	<0.34		2.0	0.34	ug/Kg			12/08/14 09:52	1
Bromoform	<0.44		2.0	0.44	ug/Kg			12/08/14 09:52	1
Bromomethane	<0.68		2.0	0.68	ug/Kg			12/08/14 09:52	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/Kg			12/08/14 09:52	1
Chlorobenzene	<0.14		1.0	0.14	ug/Kg			12/08/14 09:52	1
Chloroethane	<0.44		2.0	0.44	ug/Kg			12/08/14 09:52	1
Chloroform	<0.21		1.0	0.21	ug/Kg			12/08/14 09:52	1
Chloromethane	<0.46		2.0	0.46	ug/Kg			12/08/14 09:52	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/Kg			12/08/14 09:52	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/Kg			12/08/14 09:52	1
Dibromochloromethane	<0.35		2.0	0.35	ug/Kg			12/08/14 09:52	1
Dibromomethane	<0.48		2.0	0.48	ug/Kg			12/08/14 09:52	1
Dichlorodifluoromethane	<0.51		2.0	0.51	ug/Kg			12/08/14 09:52	1
Ethylbenzene	<0.13		0.25	0.13	ug/Kg			12/08/14 09:52	1
Hexachlorobutadiene	<0.35		2.0	0.35	ug/Kg			12/08/14 09:52	1
Isopropyl ether	<0.15		2.0	0.15	ug/Kg			12/08/14 09:52	1
Isopropylbenzene	<0.25		2.0	0.25	ug/Kg			12/08/14 09:52	1
Methyl tert-butyl ether	<0.43		2.0	0.43	ug/Kg			12/08/14 09:52	1
Methylene Chloride	<0.68		5.0	0.68	ug/Kg			12/08/14 09:52	1
Naphthalene	<0.49		2.0	0.49	ug/Kg			12/08/14 09:52	1
n-Butylbenzene	<0.13		1.0	0.13	ug/Kg			12/08/14 09:52	1
N-Propylbenzene	<0.18		2.0	0.18	ug/Kg			12/08/14 09:52	1
p-Isopropyltoluene	<0.19		2.0	0.19	ug/Kg			12/08/14 09:52	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/Kg			12/08/14 09:52	1
Styrene	<0.099		1.0	0.099	ug/Kg			12/08/14 09:52	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267450/6****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
tert-Butylbenzene	<0.14		1.0	0.14	ug/Kg			12/08/14 09:52	1
Tetrachloroethene	<0.17		1.0	0.17	ug/Kg			12/08/14 09:52	1
Toluene	<0.12		0.25	0.12	ug/Kg			12/08/14 09:52	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/Kg			12/08/14 09:52	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/Kg			12/08/14 09:52	1
Trichloroethene	<0.19		0.50	0.19	ug/Kg			12/08/14 09:52	1
Trichlorofluoromethane	<0.42		2.0	0.42	ug/Kg			12/08/14 09:52	1
Vinyl chloride	<0.10		0.25	0.10	ug/Kg			12/08/14 09:52	1
Xylenes, Total	<0.068		0.50	0.068	ug/Kg			12/08/14 09:52	1
<hr/>									
Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	94		75 - 125					12/08/14 09:52	1
4-Bromofluorobenzene (Surr)	93		75 - 120					12/08/14 09:52	1
Dibromofluoromethane	106		75 - 120					12/08/14 09:52	1
Toluene-d8 (Surr)	105		75 - 120					12/08/14 09:52	1

**Lab Sample ID: LCS 500-267450/4****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike		LCS LCS			%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/Kg		102	75 - 122	
1,1,1-Trichloroethane	50.0	46.6		ug/Kg		93	72 - 130	
1,1,2,2-Tetrachloroethane	50.0	45.1		ug/Kg		90	72 - 130	
1,1,2-Trichloroethane	50.0	48.1		ug/Kg		96	75 - 120	
1,1-Dichloroethane	50.0	48.3		ug/Kg		97	75 - 120	
1,1-Dichloroethene	50.0	50.9		ug/Kg		102	69 - 120	
1,1-Dichloropropene	50.0	49.0		ug/Kg		98	75 - 130	
1,2,3-Trichlorobenzene	50.0	51.5		ug/Kg		103	69 - 131	
1,2,3-Trichloropropane	50.0	36.8		ug/Kg		74	65 - 132	
1,2,4-Trichlorobenzene	50.0	51.3		ug/Kg		103	73 - 130	
1,2,4-Trimethylbenzene	50.0	48.4		ug/Kg		97	75 - 121	
1,2-Dibromo-3-Chloropropane	50.0	43.2		ug/Kg		86	62 - 130	
1,2-Dibromoethane	50.0	48.9		ug/Kg		98	78 - 122	
1,2-Dichlorobenzene	50.0	50.8		ug/Kg		102	75 - 120	
1,2-Dichloroethane	50.0	42.3		ug/Kg		85	69 - 130	
1,2-Dichloropropane	50.0	50.3		ug/Kg		101	75 - 120	
1,3,5-Trimethylbenzene	50.0	48.6		ug/Kg		97	75 - 121	
1,3-Dichlorobenzene	50.0	51.0		ug/Kg		102	75 - 120	
1,3-Dichloropropane	50.0	47.7		ug/Kg		95	77 - 124	
1,4-Dichlorobenzene	50.0	50.9		ug/Kg		102	75 - 120	
2,2-Dichloropropane	50.0	44.2		ug/Kg		88	65 - 132	
2-Chlorotoluene	50.0	47.4		ug/Kg		95	75 - 120	
4-Chlorotoluene	50.0	46.8		ug/Kg		94	75 - 120	
Benzene	50.0	49.4		ug/Kg		99	75 - 120	
Bromobenzene	50.0	50.7		ug/Kg		101	75 - 120	
Bromochloromethane	50.0	52.0		ug/Kg		104	76 - 120	
Bromodichloromethane	50.0	46.5		ug/Kg		93	77 - 121	

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: LCS 500-267450/4****Matrix: Solid****Analysis Batch: 267450****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Bromoform	50.0	53.8		ug/Kg		108	68 - 126
Bromomethane	50.0	35.2		ug/Kg		70	45 - 169
Carbon tetrachloride	50.0	48.3		ug/Kg		97	70 - 130
Chlorobenzene	50.0	50.9		ug/Kg		102	75 - 120
Chloroethane	50.0	49.6		ug/Kg		99	58 - 147
Chloroform	50.0	45.6		ug/Kg		91	76 - 120
Chloromethane	50.0	46.6		ug/Kg		93	63 - 133
cis-1,2-Dichloroethene	50.0	50.1		ug/Kg		100	75 - 120
cis-1,3-Dichloropropene	50.0	47.2		ug/Kg		94	78 - 130
Dibromochloromethane	50.0	51.4		ug/Kg		103	71 - 126
Dibromomethane	50.0	46.9		ug/Kg		94	75 - 120
Dichlorodifluoromethane	50.0	48.6		ug/Kg		97	41 - 146
Ethylbenzene	50.0	50.8		ug/Kg		102	75 - 120
Hexachlorobutadiene	50.0	51.3		ug/Kg		103	71 - 131
Isopropylbenzene	50.0	49.1		ug/Kg		98	75 - 121
Methyl tert-butyl ether	50.0	42.8		ug/Kg		86	75 - 130
Methylene Chloride	50.0	48.2		ug/Kg		96	73 - 130
Naphthalene	50.0	47.0		ug/Kg		94	69 - 135
n-Butylbenzene	50.0	48.8		ug/Kg		98	75 - 121
N-Propylbenzene	50.0	48.8		ug/Kg		98	75 - 120
p-Isopropyltoluene	50.0	50.4		ug/Kg		101	75 - 121
sec-Butylbenzene	50.0	48.8		ug/Kg		98	75 - 120
Styrene	50.0	51.1		ug/Kg		102	75 - 120
tert-Butylbenzene	50.0	49.4		ug/Kg		99	75 - 123
Tetrachloroethene	50.0	54.7		ug/Kg		109	75 - 120
Toluene	50.0	49.6		ug/Kg		99	75 - 120
trans-1,2-Dichloroethene	50.0	50.5		ug/Kg		101	77 - 120
trans-1,3-Dichloropropene	50.0	46.2		ug/Kg		92	74 - 130
Trichloroethene	50.0	53.6		ug/Kg		107	75 - 120
Trichlorofluoromethane	50.0	42.2		ug/Kg		84	71 - 130
Vinyl chloride	50.0	46.2		ug/Kg		92	72 - 123
Xylenes, Total	100	97.5		ug/Kg		98	75 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	87		75 - 125
4-Bromofluorobenzene (Surr)	95		75 - 120
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	103		75 - 120

**Lab Sample ID: MB 500-267511/6****Matrix: Water****Analysis Batch: 267511****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.25		1.0	0.25	ug/L			12/08/14 20:31	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/L			12/08/14 20:31	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/L			12/08/14 20:31	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/L			12/08/14 20:31	1

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## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267511/6****Matrix: Water****Analysis Batch: 267511****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethane	<0.19		1.0	0.19	ug/L			12/08/14 20:31	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/L			12/08/14 20:31	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/L			12/08/14 20:31	1
1,2,3-Trichlorobenzene	<0.24		1.0	0.24	ug/L			12/08/14 20:31	1
1,2,3-Trichloropropane	<0.45		1.0	0.45	ug/L			12/08/14 20:31	1
1,2,4-Trichlorobenzene	<0.31		1.0	0.31	ug/L			12/08/14 20:31	1
1,2,4-Trimethylbenzene	<0.14		1.0	0.14	ug/L			12/08/14 20:31	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/L			12/08/14 20:31	1
1,2-Dibromoethane	<0.36		1.0	0.36	ug/L			12/08/14 20:31	1
1,2-Dichlorobenzene	<0.27		1.0	0.27	ug/L			12/08/14 20:31	1
1,2-Dichloroethane	<0.28		1.0	0.28	ug/L			12/08/14 20:31	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/L			12/08/14 20:31	1
1,3,5-Trimethylbenzene	<0.18		1.0	0.18	ug/L			12/08/14 20:31	1
1,3-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/08/14 20:31	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/L			12/08/14 20:31	1
1,4-Dichlorobenzene	<0.15		1.0	0.15	ug/L			12/08/14 20:31	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/L			12/08/14 20:31	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/L			12/08/14 20:31	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/L			12/08/14 20:31	1
Benzene	<0.074		0.50	0.074	ug/L			12/08/14 20:31	1
Bromobenzene	<0.25		1.0	0.25	ug/L			12/08/14 20:31	1
Bromochloromethane	<0.40		1.0	0.40	ug/L			12/08/14 20:31	1
Bromodichloromethane	<0.17		1.0	0.17	ug/L			12/08/14 20:31	1
Bromoform	<0.28		1.0	0.28	ug/L			12/08/14 20:31	1
Bromomethane	<0.31		1.0	0.31	ug/L			12/08/14 20:31	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/L			12/08/14 20:31	1
Chlorobenzene	<0.14		1.0	0.14	ug/L			12/08/14 20:31	1
Chloroethane	<0.34		1.0	0.34	ug/L			12/08/14 20:31	1
Chloroform	<0.20		1.0	0.20	ug/L			12/08/14 20:31	1
Chloromethane	<0.18		1.0	0.18	ug/L			12/08/14 20:31	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/L			12/08/14 20:31	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/L			12/08/14 20:31	1
Dibromochloromethane	<0.32		1.0	0.32	ug/L			12/08/14 20:31	1
Dibromomethane	<0.33		1.0	0.33	ug/L			12/08/14 20:31	1
Dichlorodifluoromethane	<0.20		1.0	0.20	ug/L			12/08/14 20:31	1
Ethylbenzene	<0.13		0.50	0.13	ug/L			12/08/14 20:31	1
Hexachlorobutadiene	<0.26		1.0	0.26	ug/L			12/08/14 20:31	1
Isopropyl ether	<0.15		1.0	0.15	ug/L			12/08/14 20:31	1
Isopropylbenzene	<0.14		1.0	0.14	ug/L			12/08/14 20:31	1
Methyl tert-butyl ether	<0.24		1.0	0.24	ug/L			12/08/14 20:31	1
Methylene Chloride	<0.68		5.0	0.68	ug/L			12/08/14 20:31	1
Naphthalene	<0.16		1.0	0.16	ug/L			12/08/14 20:31	1
n-Butylbenzene	<0.13		1.0	0.13	ug/L			12/08/14 20:31	1
N-Propylbenzene	<0.13		1.0	0.13	ug/L			12/08/14 20:31	1
p-Isopropyltoluene	<0.17		1.0	0.17	ug/L			12/08/14 20:31	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/L			12/08/14 20:31	1
Styrene	<0.10		1.0	0.10	ug/L			12/08/14 20:31	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/L			12/08/14 20:31	1

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## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267511/6****Matrix: Water****Analysis Batch: 267511****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Tetrachloroethene	<0.17		1.0	0.17	ug/L			12/08/14 20:31	1
Toluene	<0.11		0.50	0.11	ug/L			12/08/14 20:31	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/L			12/08/14 20:31	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/L			12/08/14 20:31	1
Trichloroethene	<0.19		0.50	0.19	ug/L			12/08/14 20:31	1
Trichlorofluoromethane	<0.19		1.0	0.19	ug/L			12/08/14 20:31	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			12/08/14 20:31	1
Xylenes, Total	<0.068		1.0	0.068	ug/L			12/08/14 20:31	1
Surrogate	MB		Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	93		75 - 125					12/08/14 20:31	1
4-Bromofluorobenzene (Surr)	91		75 - 120					12/08/14 20:31	1
Dibromofluoromethane	105		75 - 120					12/08/14 20:31	1
Toluene-d8 (Surr)	105		75 - 120					12/08/14 20:31	1

**Lab Sample ID: LCS 500-267511/4****Matrix: Water****Analysis Batch: 267511****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
	Added							Limits	
1,1,1,2-Tetrachloroethane	50.0		52.6		ug/L		105	75 - 122	
1,1,1-Trichloroethane	50.0		45.8		ug/L		92	72 - 130	
1,1,2,2-Tetrachloroethane	50.0		48.7		ug/L		97	72 - 130	
1,1,2-Trichloroethane	50.0		50.5		ug/L		101	75 - 120	
1,1-Dichloroethane	50.0		48.2		ug/L		96	75 - 120	
1,1-Dichloroethene	50.0		46.9		ug/L		94	69 - 120	
1,1-Dichloropropene	50.0		47.3		ug/L		95	75 - 130	
1,2,3-Trichlorobenzene	50.0		51.9		ug/L		104	69 - 131	
1,2,3-Trichloropropane	50.0		49.2		ug/L		98	65 - 132	
1,2,4-Trichlorobenzene	50.0		49.7		ug/L		99	73 - 130	
1,2,4-Trimethylbenzene	50.0		47.0		ug/L		94	75 - 121	
1,2-Dibromo-3-Chloropropane	50.0		44.0		ug/L		88	62 - 130	
1,2-Dibromoethane	50.0		52.9		ug/L		106	78 - 122	
1,2-Dichlorobenzene	50.0		51.0		ug/L		102	75 - 120	
1,2-Dichloroethane	50.0		44.7		ug/L		89	69 - 130	
1,2-Dichloropropene	50.0		52.7		ug/L		105	75 - 120	
1,3,5-Trimethylbenzene	50.0		47.2		ug/L		94	75 - 121	
1,3-Dichlorobenzene	50.0		50.5		ug/L		101	75 - 120	
1,3-Dichloropropane	50.0		50.3		ug/L		101	77 - 124	
1,4-Dichlorobenzene	50.0		50.4		ug/L		101	75 - 120	
2,2-Dichloropropane	50.0		41.5		ug/L		83	65 - 132	
2-Chlorotoluene	50.0		46.2		ug/L		92	75 - 120	
4-Chlorotoluene	50.0		45.5		ug/L		91	75 - 120	
Benzene	50.0		49.8		ug/L		100	75 - 120	
Bromobenzene	50.0		51.5		ug/L		103	75 - 120	
Bromochloromethane	50.0		54.2		ug/L		108	76 - 120	
Bromodichloromethane	50.0		47.8		ug/L		96	77 - 121	
Bromoform	50.0		55.7		ug/L		111	68 - 126	

TestAmerica Chicago

**QC Sample Results**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)****Lab Sample ID: LCS 500-267511/4****Matrix: Water****Analysis Batch: 267511****Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS			Unit	D	%Rec	%Rec.
	Added	Result	Qualifier	Limits				
Bromomethane	50.0	37.2		ug/L	74	45 - 169		
Carbon tetrachloride	50.0	47.2		ug/L	94	70 - 130		
Chlorobenzene	50.0	50.6		ug/L	101	75 - 120		
Chloroethane	50.0	45.2		ug/L	90	58 - 147		
Chloroform	50.0	46.7		ug/L	93	76 - 120		
Chloromethane	50.0	45.8		ug/L	92	63 - 133		
cis-1,2-Dichloroethene	50.0	50.1		ug/L	100	75 - 120		
cis-1,3-Dichloropropene	50.0	48.8		ug/L	98	78 - 130		
Dibromochloromethane	50.0	54.1		ug/L	108	71 - 126		
Dibromomethane	50.0	49.2		ug/L	98	75 - 120		
Dichlorodifluoromethane	50.0	47.2		ug/L	94	41 - 146		
Ethylbenzene	50.0	49.7		ug/L	99	75 - 120		
Hexachlorobutadiene	50.0	49.6		ug/L	99	71 - 131		
Isopropylbenzene	50.0	47.6		ug/L	95	75 - 121		
Methyl tert-butyl ether	50.0	45.5		ug/L	91	75 - 130		
Methylene Chloride	50.0	48.7		ug/L	97	73 - 130		
Naphthalene	50.0	49.3		ug/L	99	69 - 135		
n-Butylbenzene	50.0	45.5		ug/L	91	75 - 121		
N-Propylbenzene	50.0	46.6		ug/L	93	75 - 120		
p-Isopropyltoluene	50.0	47.6		ug/L	95	75 - 121		
sec-Butylbenzene	50.0	47.3		ug/L	95	75 - 120		
Styrene	50.0	51.6		ug/L	103	75 - 120		
tert-Butylbenzene	50.0	47.6		ug/L	95	75 - 123		
Tetrachloroethene	50.0	53.1		ug/L	106	75 - 120		
Toluene	50.0	49.9		ug/L	100	75 - 120		
trans-1,2-Dichloroethene	50.0	49.6		ug/L	99	77 - 120		
trans-1,3-Dichloropropene	50.0	46.4		ug/L	93	74 - 130		
Trichloroethene	50.0	53.1		ug/L	106	75 - 120		
Trichlorofluoromethane	50.0	43.0		ug/L	86	71 - 130		
Vinyl chloride	50.0	45.5		ug/L	91	72 - 123		
Xylenes, Total	100	96.2		ug/L	96	75 - 120		

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	92		75 - 125
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane	102		75 - 120
Toluene-d8 (Surr)	104		75 - 120

**Lab Sample ID: 500-88912-9 MS****Matrix: Water****Analysis Batch: 267511****Client Sample ID: PP-GW-MW-2**  
**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS			%Rec.		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1,2-Tetrachloroethane	<0.25		50.0	44.4		ug/L	89	75 - 122	
1,1,1-Trichloroethane	<0.20		50.0	39.7		ug/L	79	72 - 130	
1,1,2,2-Tetrachloroethane	<0.23		50.0	42.1		ug/L	84	72 - 130	
1,1,2-Trichloroethane	<0.28		50.0	42.7		ug/L	85	75 - 120	
1,1-Dichloroethane	<0.19		50.0	41.9		ug/L	84	75 - 120	

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: 500-88912-9 MS****Client Sample ID: PP-GW-MW-2****Matrix: Water****Prep Type: Total/NA****Analysis Batch: 267511**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1-Dichloroethene	<0.31		50.0	41.6		ug/L	83	69 - 120	
1,1-Dichloropropene	<0.34		50.0	41.4		ug/L	83	75 - 130	
1,2,3-Trichlorobenzene	<0.24		50.0	43.0		ug/L	86	69 - 131	
1,2,3-Trichloropropane	<0.45		50.0	43.0		ug/L	86	65 - 132	
1,2,4-Trichlorobenzene	<0.31		50.0	41.6		ug/L	83	73 - 130	
1,2,4-Trimethylbenzene	<0.14		50.0	41.9		ug/L	84	75 - 121	
1,2-Dibromo-3-Chloropropane	<0.87		50.0	37.9		ug/L	76	62 - 130	
1,2-Dibromoethane	<0.36		50.0	43.3		ug/L	87	78 - 122	
1,2-Dichlorobenzene	<0.27		50.0	44.8		ug/L	90	75 - 120	
1,2-Dichloroethane	<0.28		50.0	38.2		ug/L	76	69 - 130	
1,2-Dichloropropane	<0.20		50.0	44.9		ug/L	90	75 - 120	
1,3,5-Trimethylbenzene	<0.18		50.0	42.4		ug/L	85	75 - 121	
1,3-Dichlorobenzene	<0.15		50.0	44.1		ug/L	88	75 - 120	
1,3-Dichloropropane	<0.13		50.0	42.6		ug/L	85	77 - 124	
1,4-Dichlorobenzene	<0.15		50.0	43.7		ug/L	87	75 - 120	
2,2-Dichloropropane	<0.32		50.0	34.8		ug/L	70	65 - 132	
2-Chlorotoluene	<0.21		50.0	41.0		ug/L	82	75 - 120	
4-Chlorotoluene	<0.20		50.0	40.6		ug/L	81	75 - 120	
Benzene	<0.074		50.0	43.2		ug/L	86	75 - 120	
Bromobenzene	<0.25		50.0	45.5		ug/L	91	75 - 120	
Bromochloromethane	<0.40		50.0	46.4		ug/L	93	76 - 120	
Bromodichloromethane	<0.17		50.0	40.8		ug/L	82	77 - 121	
Bromoform	<0.28		50.0	47.1		ug/L	94	68 - 126	
Bromomethane	<0.31		50.0	30.5		ug/L	61	45 - 169	
Carbon tetrachloride	<0.26		50.0	41.1		ug/L	82	70 - 130	
Chlorobenzene	<0.14		50.0	43.9		ug/L	88	75 - 120	
Chloroethane	<0.34		50.0	38.3		ug/L	77	58 - 147	
Chloroform	<0.20		50.0	40.3		ug/L	81	76 - 120	
Chloromethane	<0.18		50.0	39.9		ug/L	80	63 - 133	
cis-1,2-Dichloroethene	<0.12		50.0	43.9		ug/L	88	75 - 120	
cis-1,3-Dichloropropene	<0.18		50.0	39.9		ug/L	80	78 - 130	
Dibromochloromethane	<0.32		50.0	45.0		ug/L	90	71 - 126	
Dibromomethane	<0.33		50.0	41.2		ug/L	82	75 - 120	
Dichlorodifluoromethane	<0.20		50.0	43.5		ug/L	87	41 - 146	
Ethylbenzene	<0.13		50.0	43.4		ug/L	87	75 - 120	
Hexachlorobutadiene	<0.26		50.0	45.1		ug/L	90	71 - 131	
Isopropylbenzene	<0.14		50.0	42.8		ug/L	86	75 - 121	
Methyl tert-butyl ether	<0.24		50.0	38.0		ug/L	76	75 - 130	
Methylene Chloride	<0.68		50.0	41.8		ug/L	84	73 - 130	
Naphthalene	<0.16		50.0	40.9		ug/L	82	69 - 135	
n-Butylbenzene	<0.13		50.0	40.5		ug/L	81	75 - 121	
N-Propylbenzene	<0.13		50.0	41.9		ug/L	84	75 - 120	
p-Isopropyltoluene	<0.17		50.0	43.1		ug/L	86	75 - 121	
sec-Butylbenzene	<0.15		50.0	42.6		ug/L	85	75 - 120	
Styrene	<0.10		50.0	44.8		ug/L	90	75 - 120	
tert-Butylbenzene	<0.14		50.0	43.5		ug/L	87	75 - 123	
Tetrachloroethene	<0.17		50.0	45.9		ug/L	92	75 - 120	
Toluene	<0.11		50.0	43.6		ug/L	87	75 - 120	

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: 500-88912-9 MS****Matrix: Water****Analysis Batch: 267511****Client Sample ID: PP-GW-MW-2****Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
trans-1,2-Dichloroethene	<0.25		50.0	42.7		ug/L		85	77 - 120
trans-1,3-Dichloropropene	<0.21		50.0	39.0		ug/L		78	74 - 130
Trichloroethene	<0.19		50.0	46.0		ug/L		92	75 - 120
Trichlorofluoromethane	<0.19		50.0	39.6		ug/L		79	71 - 130
Vinyl chloride	<0.10		50.0	43.4		ug/L		87	72 - 123
Xylenes, Total	<0.068		100	83.9		ug/L		84	75 - 120
<b>Surrogate</b>									
	MS	MS							
	%Recovery	Qualifier				Limits			
1,2-Dichloroethane-d4 (Surr)	90					75 - 125			
4-Bromofluorobenzene (Surr)	94					75 - 120			
Dibromofluoromethane	102					75 - 120			
Toluene-d8 (Surr)	104					75 - 120			

**Lab Sample ID: 500-88912-9 MSD****Matrix: Water****Analysis Batch: 267511****Client Sample ID: PP-GW-MW-2****Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1,2-Tetrachloroethane	<0.25		50.0	50.7		ug/L		101	75 - 122	13	20
1,1,1-Trichloroethane	<0.20		50.0	44.9		ug/L		90	72 - 130	12	20
1,1,2,2-Tetrachloroethane	<0.23		50.0	47.7		ug/L		95	72 - 130	13	20
1,1,2-Trichloroethane	<0.28		50.0	48.2		ug/L		96	75 - 120	12	20
1,1-Dichloroethane	<0.19		50.0	47.4		ug/L		95	75 - 120	12	20
1,1-Dichloroethene	<0.31		50.0	46.4		ug/L		93	69 - 120	11	20
1,1-Dichloropropene	<0.34		50.0	46.0		ug/L		92	75 - 130	11	20
1,2,3-Trichlorobenzene	<0.24		50.0	49.6		ug/L		99	69 - 131	14	20
1,2,3-Trichloropropane	<0.45		50.0	48.2		ug/L		96	65 - 132	11	20
1,2,4-Trichlorobenzene	<0.31		50.0	46.6		ug/L		93	73 - 130	11	20
1,2,4-Trimethylbenzene	<0.14		50.0	46.5		ug/L		93	75 - 121	11	20
1,2-Dibromo-3-Chloropropane	<0.87		50.0	44.8		ug/L		90	62 - 130	17	20
1,2-Dibromoethane	<0.36		50.0	50.3		ug/L		101	78 - 122	15	20
1,2-Dichlorobenzene	<0.27		50.0	50.1		ug/L		100	75 - 120	11	20
1,2-Dichloroethane	<0.28		50.0	43.1		ug/L		86	69 - 130	12	20
1,2-Dichloropropane	<0.20		50.0	49.9		ug/L		100	75 - 120	11	20
1,3,5-Trimethylbenzene	<0.18		50.0	47.2		ug/L		94	75 - 121	11	20
1,3-Dichlorobenzene	<0.15		50.0	49.6		ug/L		99	75 - 120	12	20
1,3-Dichloropropane	<0.13		50.0	48.4		ug/L		97	77 - 124	13	20
1,4-Dichlorobenzene	<0.15		50.0	48.6		ug/L		97	75 - 120	11	20
2,2-Dichloropropane	<0.32		50.0	39.2		ug/L		78	65 - 132	12	20
2-Chlorotoluene	<0.21		50.0	45.8		ug/L		92	75 - 120	11	20
4-Chlorotoluene	<0.20		50.0	45.3		ug/L		91	75 - 120	11	20
Benzene	<0.074		50.0	48.3		ug/L		97	75 - 120	11	20
Bromobenzene	<0.25		50.0	51.1		ug/L		102	75 - 120	12	20
Bromochloromethane	<0.40		50.0	52.0		ug/L		104	76 - 120	11	20
Bromodichloromethane	<0.17		50.0	46.6		ug/L		93	77 - 121	13	20
Bromoform	<0.28		50.0	53.9		ug/L		108	68 - 126	14	20
Bromomethane	<0.31		50.0	35.3		ug/L		71	45 - 169	15	20
Carbon tetrachloride	<0.26		50.0	45.9		ug/L		92	70 - 130	11	20

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: 500-88912-9 MSD****Matrix: Water****Analysis Batch: 267511****Client Sample ID: PP-GW-MW-2****Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chlorobenzene	<0.14		50.0	49.5		ug/L	99	75 - 120	12	20	
Chloroethane	<0.34		50.0	46.3		ug/L	93	58 - 147	19	20	
Chloroform	<0.20		50.0	45.2		ug/L	90	76 - 120	12	20	
Chloromethane	<0.18		50.0	44.9		ug/L	90	63 - 133	12	20	
cis-1,2-Dichloroethene	<0.12		50.0	48.1		ug/L	96	75 - 120	9	20	
cis-1,3-Dichloropropene	<0.18		50.0	45.7		ug/L	91	78 - 130	13	20	
Dibromochloromethane	<0.32		50.0	51.9		ug/L	104	71 - 126	14	20	
Dibromomethane	<0.33		50.0	48.0		ug/L	96	75 - 120	15	20	
Dichlorodifluoromethane	<0.20		50.0	45.0		ug/L	90	41 - 146	3	20	
Ethylbenzene	<0.13		50.0	48.5		ug/L	97	75 - 120	11	20	
Hexachlorobutadiene	<0.26		50.0	49.1		ug/L	98	71 - 131	9	20	
Isopropylbenzene	<0.14		50.0	47.7		ug/L	95	75 - 121	11	20	
Methyl tert-butyl ether	<0.24		50.0	42.7		ug/L	85	75 - 130	12	20	
Methylene Chloride	<0.68		50.0	46.9		ug/L	94	73 - 130	11	20	
Naphthalene	<0.16		50.0	48.1		ug/L	96	69 - 135	16	20	
n-Butylbenzene	<0.13		50.0	43.9		ug/L	88	75 - 121	8	20	
N-Propylbenzene	<0.13		50.0	46.4		ug/L	93	75 - 120	10	20	
p-Isopropyltoluene	<0.17		50.0	47.5		ug/L	95	75 - 121	10	20	
sec-Butylbenzene	<0.15		50.0	47.6		ug/L	95	75 - 120	11	20	
Styrene	<0.10		50.0	49.6		ug/L	99	75 - 120	10	20	
tert-Butylbenzene	<0.14		50.0	48.2		ug/L	96	75 - 123	10	20	
Tetrachloroethene	<0.17		50.0	51.3		ug/L	103	75 - 120	11	20	
Toluene	<0.11		50.0	48.6		ug/L	97	75 - 120	11	20	
trans-1,2-Dichloroethene	<0.25		50.0	48.2		ug/L	96	77 - 120	12	20	
trans-1,3-Dichloropropene	<0.21		50.0	43.9		ug/L	88	74 - 130	12	20	
Trichloroethene	<0.19		50.0	51.7		ug/L	103	75 - 120	12	20	
Trichlorofluoromethane	<0.19		50.0	42.1		ug/L	84	71 - 130	6	20	
Vinyl chloride	<0.10		50.0	44.8		ug/L	90	72 - 123	3	20	
Xylenes, Total	<0.068		100	93.7		ug/L	94	75 - 120	11	20	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	88		75 - 125
4-Bromo/fluorobenzene (Surr)	94		75 - 120
Dibromofluoromethane	101		75 - 120
Toluene-d8 (Surr)	103		75 - 120

**Lab Sample ID: MB 500-267513/6****Matrix: Solid****Analysis Batch: 267513****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.35		2.0	0.35	ug/Kg			12/08/14 20:31	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/Kg			12/08/14 20:31	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/Kg			12/08/14 20:31	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/Kg			12/08/14 20:31	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/Kg			12/08/14 20:31	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/Kg			12/08/14 20:31	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/Kg			12/08/14 20:31	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-267513/6

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267513

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,3-Trichlorobenzene	<0.35		2.0	0.35	ug/Kg			12/08/14 20:31	1
1,2,3-Trichloropropane	<0.57		2.0	0.57	ug/Kg			12/08/14 20:31	1
1,2,4-Trichlorobenzene	<0.38		2.0	0.38	ug/Kg			12/08/14 20:31	1
1,2,4-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 20:31	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/Kg			12/08/14 20:31	1
1,2-Dibromoethane	<0.31		2.0	0.31	ug/Kg			12/08/14 20:31	1
1,2-Dichlorobenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 20:31	1
1,2-Dichloroethane	<0.29		1.0	0.29	ug/Kg			12/08/14 20:31	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/Kg			12/08/14 20:31	1
1,3,5-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/08/14 20:31	1
1,3-Dichlorobenzene	<0.26		2.0	0.26	ug/Kg			12/08/14 20:31	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/Kg			12/08/14 20:31	1
1,4-Dichlorobenzene	<0.17		2.0	0.17	ug/Kg			12/08/14 20:31	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/Kg			12/08/14 20:31	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/Kg			12/08/14 20:31	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/Kg			12/08/14 20:31	1
Benzene	<0.074		0.25	0.074	ug/Kg			12/08/14 20:31	1
Bromobenzene	<0.43		2.0	0.43	ug/Kg			12/08/14 20:31	1
Bromochloromethane	<0.38		2.0	0.38	ug/Kg			12/08/14 20:31	1
Bromodichloromethane	<0.34		2.0	0.34	ug/Kg			12/08/14 20:31	1
Bromoform	<0.44		2.0	0.44	ug/Kg			12/08/14 20:31	1
Bromomethane	<0.68		2.0	0.68	ug/Kg			12/08/14 20:31	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/Kg			12/08/14 20:31	1
Chlorobenzene	<0.14		1.0	0.14	ug/Kg			12/08/14 20:31	1
Chloroethane	<0.44		2.0	0.44	ug/Kg			12/08/14 20:31	1
Chloroform	<0.21		1.0	0.21	ug/Kg			12/08/14 20:31	1
Chloromethane	<0.46		2.0	0.46	ug/Kg			12/08/14 20:31	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/Kg			12/08/14 20:31	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/Kg			12/08/14 20:31	1
Dibromochloromethane	<0.35		2.0	0.35	ug/Kg			12/08/14 20:31	1
Dibromomethane	<0.48		2.0	0.48	ug/Kg			12/08/14 20:31	1
Dichlorodifluoromethane	<0.51		2.0	0.51	ug/Kg			12/08/14 20:31	1
Ethylbenzene	<0.13		0.25	0.13	ug/Kg			12/08/14 20:31	1
Hexachlorobutadiene	<0.35		2.0	0.35	ug/Kg			12/08/14 20:31	1
Isopropyl ether	<0.15		2.0	0.15	ug/Kg			12/08/14 20:31	1
Isopropylbenzene	<0.25		2.0	0.25	ug/Kg			12/08/14 20:31	1
Methyl tert-butyl ether	<0.43		2.0	0.43	ug/Kg			12/08/14 20:31	1
Methylene Chloride	<0.68		5.0	0.68	ug/Kg			12/08/14 20:31	1
Naphthalene	<0.49		2.0	0.49	ug/Kg			12/08/14 20:31	1
n-Butylbenzene	<0.13		1.0	0.13	ug/Kg			12/08/14 20:31	1
N-Propylbenzene	<0.18		2.0	0.18	ug/Kg			12/08/14 20:31	1
p-Isopropyltoluene	<0.19		2.0	0.19	ug/Kg			12/08/14 20:31	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/Kg			12/08/14 20:31	1
Styrene	<0.099		1.0	0.099	ug/Kg			12/08/14 20:31	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/Kg			12/08/14 20:31	1
Tetrachloroethene	<0.17		1.0	0.17	ug/Kg			12/08/14 20:31	1
Toluene	<0.12		0.25	0.12	ug/Kg			12/08/14 20:31	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/Kg			12/08/14 20:31	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-267513/6

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267513

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/Kg			12/08/14 20:31	1
Trichloroethene	<0.19		0.50	0.19	ug/Kg			12/08/14 20:31	1
Trichlorofluoromethane	<0.42		2.0	0.42	ug/Kg			12/08/14 20:31	1
Vinyl chloride	<0.10		0.25	0.10	ug/Kg			12/08/14 20:31	1
Xylenes, Total	<0.068		0.50	0.068	ug/Kg			12/08/14 20:31	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	93		75 - 125					12/08/14 20:31	1
4-Bromofluorobenzene (Surr)	91		75 - 120					12/08/14 20:31	1
Dibromofluoromethane	105		75 - 120					12/08/14 20:31	1
Toluene-d8 (Surr)	105		75 - 120					12/08/14 20:31	1

Lab Sample ID: LCS 500-267513/4

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267513

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	75 - 122
1,1,1-Trichloroethane	50.0	45.8		ug/Kg		92	72 - 130
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/Kg		97	72 - 130
1,1,2-Trichloroethane	50.0	50.5		ug/Kg		101	75 - 120
1,1-Dichloroethane	50.0	48.2		ug/Kg		96	75 - 120
1,1-Dichloroethene	50.0	46.9		ug/Kg		94	69 - 120
1,1-Dichloropropene	50.0	47.3		ug/Kg		95	75 - 130
1,2,3-Trichlorobenzene	50.0	51.9		ug/Kg		104	69 - 131
1,2,3-Trichloropropane	50.0	49.2		ug/Kg		98	65 - 132
1,2,4-Trichlorobenzene	50.0	49.7		ug/Kg		99	73 - 130
1,2,4-Trimethylbenzene	50.0	47.0		ug/Kg		94	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	44.0		ug/Kg		88	62 - 130
1,2-Dibromoethane	50.0	52.9		ug/Kg		106	78 - 122
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	75 - 120
1,2-Dichloroethane	50.0	44.7		ug/Kg		89	69 - 130
1,2-Dichloropropane	50.0	52.7		ug/Kg		105	75 - 120
1,3,5-Trimethylbenzene	50.0	47.2		ug/Kg		94	75 - 121
1,3-Dichlorobenzene	50.0	50.5		ug/Kg		101	75 - 120
1,3-Dichloropropane	50.0	50.3		ug/Kg		101	77 - 124
1,4-Dichlorobenzene	50.0	50.4		ug/Kg		101	75 - 120
2,2-Dichloropropane	50.0	41.5		ug/Kg		83	65 - 132
2-Chlorotoluene	50.0	46.2		ug/Kg		92	75 - 120
4-Chlorotoluene	50.0	45.5		ug/Kg		91	75 - 120
Benzene	50.0	49.8		ug/Kg		100	75 - 120
Bromobenzene	50.0	51.5		ug/Kg		103	75 - 120
Bromochloromethane	50.0	54.2		ug/Kg		108	76 - 120
Bromodichloromethane	50.0	47.8		ug/Kg		96	77 - 121
Bromoform	50.0	55.7		ug/Kg		111	68 - 126
Bromomethane	50.0	37.2		ug/Kg		74	45 - 169
Carbon tetrachloride	50.0	47.2		ug/Kg		94	70 - 130
Chlorobenzene	50.0	50.6		ug/Kg		101	75 - 120

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## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: LCS 500-267513/4****Matrix: Solid****Analysis Batch: 267513****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Chloroethane	50.0	45.2		ug/Kg	90	58 - 147	
Chloroform	50.0	46.7		ug/Kg	93	76 - 120	
Chloromethane	50.0	45.8		ug/Kg	92	63 - 133	
cis-1,2-Dichloroethene	50.0	50.1		ug/Kg	100	75 - 120	
cis-1,3-Dichloropropene	50.0	48.8		ug/Kg	98	78 - 130	
Dibromochloromethane	50.0	54.1		ug/Kg	108	71 - 126	
Dibromomethane	50.0	49.2		ug/Kg	98	75 - 120	
Dichlorodifluoromethane	50.0	47.2		ug/Kg	94	41 - 146	
Ethylbenzene	50.0	49.7		ug/Kg	99	75 - 120	
Hexachlorobutadiene	50.0	49.6		ug/Kg	99	71 - 131	
Isopropylbenzene	50.0	47.6		ug/Kg	95	75 - 121	
Methyl tert-butyl ether	50.0	45.5		ug/Kg	91	75 - 130	
Methylene Chloride	50.0	48.7		ug/Kg	97	73 - 130	
Naphthalene	50.0	49.3		ug/Kg	99	69 - 135	
n-Butylbenzene	50.0	45.5		ug/Kg	91	75 - 121	
N-Propylbenzene	50.0	46.6		ug/Kg	93	75 - 120	
p-Isopropyltoluene	50.0	47.6		ug/Kg	95	75 - 121	
sec-Butylbenzene	50.0	47.3		ug/Kg	95	75 - 120	
Styrene	50.0	51.6		ug/Kg	103	75 - 120	
tert-Butylbenzene	50.0	47.6		ug/Kg	95	75 - 123	
Tetrachloroethene	50.0	53.1		ug/Kg	106	75 - 120	
Toluene	50.0	49.9		ug/Kg	100	75 - 120	
trans-1,2-Dichloroethene	50.0	49.6		ug/Kg	99	77 - 120	
trans-1,3-Dichloropropene	50.0	46.4		ug/Kg	93	74 - 130	
Trichloroethene	50.0	53.1		ug/Kg	106	75 - 120	
Trichlorofluoromethane	50.0	43.0		ug/Kg	86	71 - 130	
Vinyl chloride	50.0	45.5		ug/Kg	91	72 - 123	
Xylenes, Total	100	96.2		ug/Kg	96	75 - 120	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	92		75 - 125
4-Bromofluorobenzene (Surr)	93		75 - 120
Dibromofluoromethane	102		75 - 120
Toluene-d8 (Surr)	104		75 - 120

**Lab Sample ID: MB 500-267617/6****Matrix: Solid****Analysis Batch: 267617****Client Sample ID: Method Blank**  
**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	<0.35		2.0	0.35	ug/Kg			12/09/14 08:55	1
1,1,1-Trichloroethane	<0.20		1.0	0.20	ug/Kg			12/09/14 08:55	1
1,1,2,2-Tetrachloroethane	<0.23		1.0	0.23	ug/Kg			12/09/14 08:55	1
1,1,2-Trichloroethane	<0.28		1.0	0.28	ug/Kg			12/09/14 08:55	1
1,1-Dichloroethane	<0.19		1.0	0.19	ug/Kg			12/09/14 08:55	1
1,1-Dichloroethene	<0.31		1.0	0.31	ug/Kg			12/09/14 08:55	1
1,1-Dichloropropene	<0.34		1.0	0.34	ug/Kg			12/09/14 08:55	1
1,2,3-Trichlorobenzene	<0.35		2.0	0.35	ug/Kg			12/09/14 08:55	1

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## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267617/6****Client Sample ID: Method Blank****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 267617**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2,3-Trichloropropane	<0.57		2.0	0.57	ug/Kg			12/09/14 08:55	1
1,2,4-Trichlorobenzene	<0.38		2.0	0.38	ug/Kg			12/09/14 08:55	1
1,2,4-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/09/14 08:55	1
1,2-Dibromo-3-Chloropropane	<0.87		2.0	0.87	ug/Kg			12/09/14 08:55	1
1,2-Dibromoethane	<0.31		2.0	0.31	ug/Kg			12/09/14 08:55	1
1,2-Dichlorobenzene	<0.21		2.0	0.21	ug/Kg			12/09/14 08:55	1
1,2-Dichloroethane	<0.29		1.0	0.29	ug/Kg			12/09/14 08:55	1
1,2-Dichloropropane	<0.20		1.0	0.20	ug/Kg			12/09/14 08:55	1
1,3,5-Trimethylbenzene	<0.21		2.0	0.21	ug/Kg			12/09/14 08:55	1
1,3-Dichlorobenzene	<0.26		2.0	0.26	ug/Kg			12/09/14 08:55	1
1,3-Dichloropropane	<0.13		1.0	0.13	ug/Kg			12/09/14 08:55	1
1,4-Dichlorobenzene	<0.17		2.0	0.17	ug/Kg			12/09/14 08:55	1
2,2-Dichloropropane	<0.32		1.0	0.32	ug/Kg			12/09/14 08:55	1
2-Chlorotoluene	<0.21		1.0	0.21	ug/Kg			12/09/14 08:55	1
4-Chlorotoluene	<0.20		1.0	0.20	ug/Kg			12/09/14 08:55	1
Benzene	<0.074		0.25	0.074	ug/Kg			12/09/14 08:55	1
Bromobenzene	<0.43		2.0	0.43	ug/Kg			12/09/14 08:55	1
Bromochloromethane	<0.38		2.0	0.38	ug/Kg			12/09/14 08:55	1
Bromodichloromethane	<0.34		2.0	0.34	ug/Kg			12/09/14 08:55	1
Bromoform	<0.44		2.0	0.44	ug/Kg			12/09/14 08:55	1
Bromomethane	<0.68		2.0	0.68	ug/Kg			12/09/14 08:55	1
Carbon tetrachloride	<0.26		1.0	0.26	ug/Kg			12/09/14 08:55	1
Chlorobenzene	<0.14		1.0	0.14	ug/Kg			12/09/14 08:55	1
Chloroethane	<0.44		2.0	0.44	ug/Kg			12/09/14 08:55	1
Chloroform	<0.21		1.0	0.21	ug/Kg			12/09/14 08:55	1
Chloromethane	<0.46		2.0	0.46	ug/Kg			12/09/14 08:55	1
cis-1,2-Dichloroethene	<0.12		1.0	0.12	ug/Kg			12/09/14 08:55	1
cis-1,3-Dichloropropene	<0.18		1.0	0.18	ug/Kg			12/09/14 08:55	1
Dibromochloromethane	<0.35		2.0	0.35	ug/Kg			12/09/14 08:55	1
Dibromomethane	<0.48		2.0	0.48	ug/Kg			12/09/14 08:55	1
Dichlorodifluoromethane	<0.51		2.0	0.51	ug/Kg			12/09/14 08:55	1
Ethylbenzene	<0.13		0.25	0.13	ug/Kg			12/09/14 08:55	1
Hexachlorobutadiene	<0.35		2.0	0.35	ug/Kg			12/09/14 08:55	1
Isopropyl ether	<0.15		2.0	0.15	ug/Kg			12/09/14 08:55	1
Isopropylbenzene	<0.25		2.0	0.25	ug/Kg			12/09/14 08:55	1
Methyl tert-butyl ether	<0.43		2.0	0.43	ug/Kg			12/09/14 08:55	1
Methylene Chloride	<0.68		5.0	0.68	ug/Kg			12/09/14 08:55	1
Naphthalene	<0.49		2.0	0.49	ug/Kg			12/09/14 08:55	1
n-Butylbenzene	<0.13		1.0	0.13	ug/Kg			12/09/14 08:55	1
N-Propylbenzene	<0.18		2.0	0.18	ug/Kg			12/09/14 08:55	1
p-Isopropyltoluene	<0.19		2.0	0.19	ug/Kg			12/09/14 08:55	1
sec-Butylbenzene	<0.15		1.0	0.15	ug/Kg			12/09/14 08:55	1
Styrene	<0.099		1.0	0.099	ug/Kg			12/09/14 08:55	1
tert-Butylbenzene	<0.14		1.0	0.14	ug/Kg			12/09/14 08:55	1
Tetrachloroethene	<0.17		1.0	0.17	ug/Kg			12/09/14 08:55	1
Toluene	<0.12		0.25	0.12	ug/Kg			12/09/14 08:55	1
trans-1,2-Dichloroethene	<0.25		1.0	0.25	ug/Kg			12/09/14 08:55	1
trans-1,3-Dichloropropene	<0.21		1.0	0.21	ug/Kg			12/09/14 08:55	1

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## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267617/6****Matrix: Solid****Analysis Batch: 267617****Client Sample ID: Method Blank****Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Trichloroethene	<0.19		0.50	0.19	ug/Kg			12/09/14 08:55	1
Trichlorofluoromethane	<0.42		2.0	0.42	ug/Kg			12/09/14 08:55	1
Vinyl chloride	<0.10		0.25	0.10	ug/Kg			12/09/14 08:55	1
Xylenes, Total	<0.068		0.50	0.068	ug/Kg			12/09/14 08:55	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,2-Dichloroethane-d4 (Surr)	90		75 - 125					12/09/14 08:55	1
4-Bromofluorobenzene (Surr)	90		75 - 120					12/09/14 08:55	1
Dibromofluoromethane	103		75 - 120					12/09/14 08:55	1
Toluene-d8 (Surr)	104		75 - 120					12/09/14 08:55	1

**Lab Sample ID: LCS 500-267617/4****Matrix: Solid****Analysis Batch: 267617****Client Sample ID: Lab Control Sample****Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
1,1,1,2-Tetrachloroethane	50.0	45.2		ug/Kg		90	75 - 122
1,1,1-Trichloroethane	50.0	39.9		ug/Kg		80	72 - 130
1,1,2,2-Tetrachloroethane	50.0	41.2		ug/Kg		82	72 - 130
1,1,2-Trichloroethane	50.0	43.6		ug/Kg		87	75 - 120
1,1-Dichloroethane	50.0	41.7		ug/Kg		83	75 - 120
1,1-Dichloroethene	50.0	41.1		ug/Kg		82	69 - 120
1,1-Dichloropropene	50.0	42.0		ug/Kg		84	75 - 130
1,2,3-Trichlorobenzene	50.0	44.9		ug/Kg		90	69 - 131
1,2,3-Trichloropropane	50.0	42.4		ug/Kg		85	65 - 132
1,2,4-Trichlorobenzene	50.0	46.0		ug/Kg		92	73 - 130
1,2,4-Trimethylbenzene	50.0	41.1		ug/Kg		82	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	38.4		ug/Kg		77	62 - 130
1,2-Dibromoethane	50.0	45.1		ug/Kg		90	78 - 122
1,2-Dichlorobenzene	50.0	44.7		ug/Kg		89	75 - 120
1,2-Dichloroethane	50.0	38.6		ug/Kg		77	69 - 130
1,2-Dichloropropane	50.0	43.6		ug/Kg		87	75 - 120
1,3,5-Trimethylbenzene	50.0	41.3		ug/Kg		83	75 - 121
1,3-Dichlorobenzene	50.0	44.4		ug/Kg		89	75 - 120
1,3-Dichloropropane	50.0	44.2		ug/Kg		88	77 - 124
1,4-Dichlorobenzene	50.0	44.7		ug/Kg		89	75 - 120
2,2-Dichloropropane	50.0	37.3		ug/Kg		75	65 - 132
2-Chlorotoluene	50.0	40.5		ug/Kg		81	75 - 120
4-Chlorotoluene	50.0	41.1		ug/Kg		82	75 - 120
Benzene	50.0	42.9		ug/Kg		86	75 - 120
Bromobenzene	50.0	44.6		ug/Kg		89	75 - 120
Bromochloromethane	50.0	46.3		ug/Kg		93	76 - 120
Bromodichloromethane	50.0	40.9		ug/Kg		82	77 - 121
Bromoform	50.0	49.1		ug/Kg		98	68 - 126
Bromomethane	50.0	38.2		ug/Kg		76	45 - 169
Carbon tetrachloride	50.0	41.0		ug/Kg		82	70 - 130
Chlorobenzene	50.0	44.8		ug/Kg		90	75 - 120
Chloroethane	50.0	46.1		ug/Kg		92	58 - 147

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**QC Sample Results**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)****Lab Sample ID: LCS 500-267617/4****Matrix: Solid****Analysis Batch: 267617****Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte	Spike	LCS			Unit	D	%Rec	%Rec.
	Added	Result	Qualifier	Limits				
Chloroform	50.0	40.4		ug/Kg		81	76 - 120	
Chloromethane	50.0	47.0		ug/Kg		94	63 - 133	
cis-1,2-Dichloroethene	50.0	44.1		ug/Kg		88	75 - 120	
cis-1,3-Dichloropropene	50.0	42.1		ug/Kg		84	78 - 130	
Dibromochloromethane	50.0	46.0		ug/Kg		92	71 - 126	
Dibromomethane	50.0	42.4		ug/Kg		85	75 - 120	
Dichlorodifluoromethane	50.0	45.7		ug/Kg		91	41 - 146	
Ethylbenzene	50.0	44.5		ug/Kg		89	75 - 120	
Hexachlorobutadiene	50.0	44.8		ug/Kg		90	71 - 131	
Isopropylbenzene	50.0	41.8		ug/Kg		84	75 - 121	
Methyl tert-butyl ether	50.0	38.1		ug/Kg		76	75 - 130	
Methylene Chloride	50.0	41.6		ug/Kg		83	73 - 130	
Naphthalene	50.0	41.6		ug/Kg		83	69 - 135	
n-Butylbenzene	50.0	41.7		ug/Kg		83	75 - 121	
N-Propylbenzene	50.0	41.4		ug/Kg		83	75 - 120	
p-Isopropyltoluene	50.0	42.6		ug/Kg		85	75 - 121	
sec-Butylbenzene	50.0	41.4		ug/Kg		83	75 - 120	
Styrene	50.0	45.3		ug/Kg		91	75 - 120	
tert-Butylbenzene	50.0	41.8		ug/Kg		84	75 - 123	
Tetrachloroethene	50.0	47.6		ug/Kg		95	75 - 120	
Toluene	50.0	44.1		ug/Kg		88	75 - 120	
trans-1,2-Dichloroethene	50.0	43.5		ug/Kg		87	77 - 120	
trans-1,3-Dichloropropene	50.0	40.8		ug/Kg		82	74 - 130	
Trichloroethene	50.0	46.5		ug/Kg		93	75 - 120	
Trichlorofluoromethane	50.0	43.6		ug/Kg		87	71 - 130	
Vinyl chloride	50.0	46.4		ug/Kg		93	72 - 123	
Xylenes, Total	100	85.7		ug/Kg		86	75 - 120	

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Sur)	89		75 - 125
4-Bromo fluoro benzene (Sur)	95		75 - 120
Dibromo fluoro methane	99		75 - 120
Toluene-d8 (Sur)	104		75 - 120

**Method: 8270D - Semivolatile Organic Compounds (GC/MS)****Lab Sample ID: MB 500-267118/1-A****Matrix: Water****Analysis Batch: 267967****Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 267118**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1-Methylnaphthalene	<0.24		0.80	0.24	ug/L		12/04/14 16:41	12/10/14 20:41	1
2-Methylnaphthalene	<0.052		0.40	0.052	ug/L		12/04/14 16:41	12/10/14 20:41	1
Acenaphthene	<0.25		0.80	0.25	ug/L		12/04/14 16:41	12/10/14 20:41	1
Acenaphthylene	<0.21		0.80	0.21	ug/L		12/04/14 16:41	12/10/14 20:41	1
Anthracene	<0.27		0.80	0.27	ug/L		12/04/14 16:41	12/10/14 20:41	1
Benz[a]anthracene	<0.045		0.16	0.045	ug/L		12/04/14 16:41	12/10/14 20:41	1
Benz[a]pyrene	<0.079		0.16	0.079	ug/L		12/04/14 16:41	12/10/14 20:41	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**
**Lab Sample ID: MB 500-267118/1-A****Matrix: Water****Analysis Batch: 267967****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 267118**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzo[b]fluoranthene	<0.065		0.16	0.065	ug/L		12/04/14 16:41	12/10/14 20:41	1
Benzo[g,h,i]perylene	<0.30		0.80	0.30	ug/L		12/04/14 16:41	12/10/14 20:41	1
Benzo[k]fluoranthene	<0.051		0.16	0.051	ug/L		12/04/14 16:41	12/10/14 20:41	1
Chrysene	<0.055		0.40	0.055	ug/L		12/04/14 16:41	12/10/14 20:41	1
Dibenz(a,h)anthracene	<0.041		0.24	0.041	ug/L		12/04/14 16:41	12/10/14 20:41	1
Fluoranthene	<0.36		0.80	0.36	ug/L		12/04/14 16:41	12/10/14 20:41	1
Fluorene	<0.20		0.80	0.20	ug/L		12/04/14 16:41	12/10/14 20:41	1
Indeno[1,2,3-cd]pyrene	<0.060		0.16	0.060	ug/L		12/04/14 16:41	12/10/14 20:41	1
Naphthalene	<0.25		0.80	0.25	ug/L		12/04/14 16:41	12/10/14 20:41	1
Phenanthrene	<0.24		0.80	0.24	ug/L		12/04/14 16:41	12/10/14 20:41	1
Pyrene	<0.34		0.80	0.34	ug/L		12/04/14 16:41	12/10/14 20:41	1
Surrogate	MB		Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
2-Fluorobiphenyl	87		41 - 132			12/04/14 16:41	12/10/14 20:41	1	
Nitrobenzene-d5 (Surr)	85		47 - 134			12/04/14 16:41	12/10/14 20:41	1	
Terphenyl-d14 (Surr)	97		59 - 150			12/04/14 16:41	12/10/14 20:41	1	

**Lab Sample ID: LCS 500-267118/2-A****Matrix: Water****Analysis Batch: 267967****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 267118**

Analyte	Spike		Added	Result	LCS Qualifier	Unit	D	%Rec	Limits
	LCS	LCS							
1-Methylnaphthalene	32.0	24.0	32.0	24.0		ug/L		75	35 - 111
2-Methylnaphthalene	32.0	24.3	32.0	24.3		ug/L		76	35 - 113
Acenaphthene	32.0	24.9	32.0	24.9		ug/L		78	41 - 120
Acenaphthylene	32.0	28.0	32.0	28.0		ug/L		88	47 - 112
Anthracene	32.0	29.1	32.0	29.1		ug/L		91	56 - 124
Benzo[a]anthracene	32.0	28.7	32.0	28.7		ug/L		90	60 - 122
Benzo[a]pyrene	32.0	32.8	32.0	32.8		ug/L		103	66 - 116
Benzo[b]fluoranthene	32.0	31.5	32.0	31.5		ug/L		99	66 - 120
Benzo[g,h,i]perylene	32.0	30.6	32.0	30.6		ug/L		95	42 - 164
Benzo[k]fluoranthene	32.0	35.3	32.0	35.3		ug/L		110	52 - 123
Chrysene	32.0	29.2	32.0	29.2		ug/L		91	59 - 126
Dibenz(a,h)anthracene	32.0	30.9	32.0	30.9		ug/L		97	53 - 149
Fluoranthene	32.0	29.7	32.0	29.7		ug/L		93	68 - 114
Fluorene	32.0	28.7	32.0	28.7		ug/L		90	50 - 125
Indeno[1,2,3-cd]pyrene	32.0	32.1	32.0	32.1		ug/L		100	53 - 151
Naphthalene	32.0	24.2	32.0	24.2		ug/L		76	41 - 106
Phenanthrene	32.0	28.9	32.0	28.9		ug/L		90	55 - 126
Pyrene	32.0	29.7	32.0	29.7		ug/L		93	62 - 118
Surrogate	LCS		Added	Result	LCS Qualifier	Unit	D	%Rec	Limits
	%Recovery	Qualifier							
2-Fluorobiphenyl	91		41 - 132						
Nitrobenzene-d5 (Surr)	92		47 - 134						
Terphenyl-d14 (Surr)	97		59 - 150						

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 500-267118/3-A**

**Matrix: Water**

**Analysis Batch: 267967**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 267118**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	32.0	22.9		ug/L		72	35 - 111	5	20
2-Methylnaphthalene	32.0	22.3		ug/L		70	35 - 113	8	20
Acenaphthene	32.0	23.8		ug/L		74	41 - 120	5	20
Acenaphthylene	32.0	26.5		ug/L		83	47 - 112	5	20
Anthracene	32.0	27.2		ug/L		85	56 - 124	7	20
Benzo[a]anthracene	32.0	27.0		ug/L		84	60 - 122	6	20
Benzo[a]pyrene	32.0	31.1		ug/L		97	66 - 116	5	20
Benzo[b]fluoranthene	32.0	30.7		ug/L		96	66 - 120	3	20
Benzo[g,h,i]perylene	32.0	28.4		ug/L		89	42 - 164	7	20
Benzo[k]fluoranthene	32.0	32.0		ug/L		100	52 - 123	10	20
Chrysene	32.0	27.2		ug/L		85	59 - 126	7	20
Dibenz(a,h)anthracene	32.0	29.1		ug/L		91	53 - 149	6	20
Fluoranthene	32.0	27.7		ug/L		86	68 - 114	7	20
Fluorene	32.0	27.2		ug/L		85	50 - 125	5	20
Indeno[1,2,3-cd]pyrene	32.0	29.9		ug/L		94	53 - 151	7	20
Naphthalene	32.0	22.7		ug/L		71	41 - 106	6	20
Phenanthrene	32.0	27.0		ug/L		84	55 - 126	7	20
Pyrene	32.0	28.0		ug/L		88	62 - 118	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	82		41 - 132
Nitrobenzene-d5 (Sur)	87		47 - 134
Terphenyl-d14 (Surr)	89		59 - 150

**Lab Sample ID: MB 500-267343/1-A**

**Matrix: Solid**

**Analysis Batch: 267764**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 267343**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<8.1		33	8.1	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
2-Methylnaphthalene	<6.1		33	6.1	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Acenaphthene	<6.0		33	6.0	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Acenaphthylene	<4.4		33	4.4	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Anthracene	<5.6		33	5.6	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Benzo[a]anthracene	<4.5		33	4.5	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Benzo[a]pyrene	<6.4		33	6.4	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Benzo[b]fluoranthene	<7.2		33	7.2	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Benzo[g,h,i]perylene	<11		33	11	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Benzo[k]fluoranthene	<9.8		33	9.8	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Chrysene	<9.1		33	9.1	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Dibenz(a,h)anthracene	<6.4		33	6.4	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Fluoranthene	<6.2		33	6.2	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Fluorene	<4.7		33	4.7	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Indeno[1,2,3-cd]pyrene	<8.6		33	8.6	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Naphthalene	<5.1		33	5.1	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Phenanthrene	<4.6		33	4.6	ug/Kg		12/05/14 16:30	12/09/14 19:30	1
Pyrene	<6.6		33	6.6	ug/Kg		12/05/14 16:30	12/09/14 19:30	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-267343/1-A

Matrix: Solid

Analysis Batch: 267764

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 267343

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl			64		25 - 119	12/05/14 16:30	12/09/14 19:30	1
Nitrobenzene-d5 (Sur)			64		25 - 115	12/05/14 16:30	12/09/14 19:30	1
Terphenyl-d14 (Surr)			95		36 - 134	12/05/14 16:30	12/09/14 19:30	1

Lab Sample ID: LCS 500-267343/2-A

Matrix: Solid

Analysis Batch: 267764

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 267343

Analyte	Spike	LCS	LCS	%Rec.			
	Added	Result	Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1330	1180		ug/Kg		88	50 - 110
2-Methylnaphthalene	1330	1210		ug/Kg		91	49 - 110
Acenaphthene	1330	1210		ug/Kg		91	47 - 110
Acenaphthylene	1330	1170		ug/Kg		87	51 - 113
Anthracene	1330	1280		ug/Kg		96	53 - 121
Benzo[a]anthracene	1330	1140		ug/Kg		85	52 - 113
Benzo[a]pyrene	1330	1370		ug/Kg		102	52 - 110
Benzo[b]fluoranthene	1330	1290		ug/Kg		96	49 - 118
Benzo[g,h,i]perylene	1330	1330		ug/Kg		100	53 - 115
Benzo[k]fluoranthene	1330	1280		ug/Kg		96	46 - 115
Chrysene	1330	1250		ug/Kg		94	51 - 112
Dibenz(a,h)anthracene	1330	1290		ug/Kg		97	48 - 113
Fluoranthene	1330	1290		ug/Kg		97	53 - 122
Fluorene	1330	1390		ug/Kg		104	51 - 119
Indeno[1,2,3-cd]pyrene	1330	1330		ug/Kg		100	49 - 113
Naphthalene	1330	1130		ug/Kg		85	49 - 110
Phenanthrene	1330	1300		ug/Kg		97	54 - 120
Pyrene	1330	1150		ug/Kg		86	54 - 119

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	75		25 - 119
Nitrobenzene-d5 (Sur)	65		25 - 115
Terphenyl-d14 (Surr)	68		36 - 134

Lab Sample ID: 500-88912-6 MS

Matrix: Solid

Analysis Batch: 267764

Client Sample ID: PP-SB-GP-4, 8-10'  
 Prep Type: Total/NA  
 Prep Batch: 267343

Analyte	Sample		Spike	MS		%Rec.			
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	19	J	1530	1490		ug/Kg	*	96	50 - 110
2-Methylnaphthalene	25	J	1530	1640		ug/Kg	*	105	49 - 110
Acenaphthene	<6.7		1530	937		ug/Kg	*	61	47 - 110
Acenaphthylene	<4.9		1530	834		ug/Kg	*	54	51 - 113
Anthracene	<6.3		1530	1110		ug/Kg	*	73	53 - 121
Benzo[a]anthracene	<5.0		1530	1100		ug/Kg	*	72	52 - 113
Benzo[a]pyrene	<7.3		1530	1370		ug/Kg	*	90	52 - 110
Benzo[b]fluoranthene	<8.1		1530	1520		ug/Kg	*	99	49 - 118
Benzo[g,h,i]perylene	<12		1530	537	F1	ug/Kg	*	35	53 - 115
Benzo[k]fluoranthene	<11		1530	1530		ug/Kg	*	100	46 - 115

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1

SDG: 25212326.00

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-88912-6 MS

Matrix: Solid

Analysis Batch: 267764

Client Sample ID: PP-SB-GP-4, 8-10'

Prep Type: Total/NA

Prep Batch: 267343

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Chrysene	<10		1530	1320		ug/Kg	*	86	51 - 112
Dibenz(a,h)anthracene	<7.2		1530	794		ug/Kg	*	52	48 - 113
Fluoranthene	<6.9		1530	1050		ug/Kg	*	69	53 - 122
Fluorene	<5.3		1530	1050		ug/Kg	*	69	51 - 119
Indeno[1,2,3-cd]pyrene	<9.7		1530	781		ug/Kg	*	51	49 - 113
Naphthalene	15 J		1530	1060		ug/Kg	*	68	49 - 110
Phenanthrene	18 J		1530	1590		ug/Kg	*	103	54 - 120
Pyrene	7.7 J		1530	1730		ug/Kg	*	113	54 - 119
<b>Surrogate</b>									
2-Fluorobiphenyl	38	%Recovery	Qualifier						
				<i>Limits</i>					
				25 - 119					
Nitrobenzene-d5 (Sur)	37			25 - 115					
Terphenyl-d14 (Sur)	81			36 - 134					

Lab Sample ID: 500-88912-6 MSD

Matrix: Solid

Analysis Batch: 267764

Client Sample ID: PP-SB-GP-4, 8-10'

Prep Type: Total/NA

Prep Batch: 267343

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1-Methylnaphthalene	19 J		1520	808	F2	ug/Kg	*	52	50 - 110	59	30
2-Methylnaphthalene	25 J		1520	830	F2	ug/Kg	*	53	49 - 110	65	30
Acenaphthene	<6.7		1520	809		ug/Kg	*	53	47 - 110	15	30
Acenaphthylene	<4.9		1520	757	F1	ug/Kg	*	50	51 - 113	10	30
Anthracene	<6.3		1520	948		ug/Kg	*	62	53 - 121	16	30
Benz[a]anthracene	<5.0		1520	886		ug/Kg	*	58	52 - 113	22	30
Benz[a]pyrene	<7.3		1520	1160		ug/Kg	*	76	52 - 110	17	30
Benz[b]fluoranthene	<8.1		1520	1250		ug/Kg	*	82	49 - 118	20	30
Benz[g,h,i]perylene	<12		1520	664	F1	ug/Kg	*	44	53 - 115	21	30
Benz[k]fluoranthene	<11		1520	1220		ug/Kg	*	80	46 - 115	23	30
Chrysene	<10		1520	1030		ug/Kg	*	68	51 - 112	24	30
Dibenz(a,h)anthracene	<7.2		1520	952		ug/Kg	*	63	48 - 113	18	30
Fluoranthene	<6.9		1520	958		ug/Kg	*	63	53 - 122	9	30
Fluorene	<5.3		1520	1060		ug/Kg	*	70	51 - 119	1	30
Indeno[1,2,3-cd]pyrene	<9.7		1520	921		ug/Kg	*	60	49 - 113	16	30
Naphthalene	15 J		1520	730	F1 F2	ug/Kg	*	47	49 - 110	37	30
Phenanthrene	18 J		1520	998	F2	ug/Kg	*	64	54 - 120	46	30
Pyrene	7.7 J		1520	941	F2	ug/Kg	*	61	54 - 119	59	30
<b>Surrogate</b>											
2-Fluorobiphenyl	40	%Recovery	Qualifier							<i>Limits</i>	
				25 - 119							
Nitrobenzene-d5 (Sur)	38			25 - 115							
Terphenyl-d14 (Sur)	49			36 - 134							

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID:** MB 500-267254/1-A

**Matrix:** Water

**Analysis Batch:** 267308

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 267254

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.067				0.40	0.067	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1221	<0.20				0.40	0.20	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1232	<0.20				0.40	0.20	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1242	<0.20				0.40	0.20	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1248	<0.20				0.40	0.20	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1254	<0.20				0.40	0.20	ug/L		12/05/14 11:05	12/05/14 16:01	1
PCB-1260	<0.070				0.40	0.070	ug/L		12/05/14 11:05	12/05/14 16:01	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl			73		29 - 126				12/05/14 11:05	12/05/14 16:01	1
Tetrachloro-m-xylene			85		50 - 120				12/05/14 11:05	12/05/14 16:01	1

**Lab Sample ID:** LCS 500-267254/4-A

**Matrix:** Water

**Analysis Batch:** 267308

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 267254

Analyte	MB	MB	Spike	Added	LCS	LCS	Unit	D	%Rec.	Limits	%Rec.
					Result	Qualifier					
PCB-1016				4.00	4.18		ug/L		105	70 - 130	
PCB-1260				4.00	3.66		ug/L		92	70 - 130	
Surrogate	MB	MB	%Recovery	Qualifier	Limits			D	%Rec.	Limits	%Rec.
DCB Decachlorobiphenyl			100		29 - 126						
Tetrachloro-m-xylene			86		50 - 120						

**Lab Sample ID:** LCSD 500-267254/5-A

**Matrix:** Water

**Analysis Batch:** 267308

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 267254

Analyte	MB	MB	Spike	Added	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
					Result	Qualifier					
PCB-1016				4.00	4.51		ug/L		113	70 - 130	8
PCB-1260				4.00	4.04		ug/L		101	70 - 130	10
Surrogate	MB	MB	%Recovery	Qualifier	Limits			D	%Rec.	RPD	Limit
DCB Decachlorobiphenyl			102		29 - 126						
Tetrachloro-m-xylene			94		50 - 120						

**Lab Sample ID:** MB 500-267588/1-A

**Matrix:** Solid

**Analysis Batch:** 267318

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 267588

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016			<5.9		17	5.9	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
PCB-1221			<7.3		17	7.3	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
PCB-1232			<7.3		17	7.3	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
PCB-1242			<5.5		17	5.5	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
PCB-1248			<6.6		17	6.6	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
PCB-1254			<3.6		17	3.6	ug/Kg		12/08/14 18:08	12/08/14 23:52	1

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 500-267588/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267318

Prep Batch: 267588

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1260	<8.2		17	8.2	ug/Kg		12/08/14 18:08	12/08/14 23:52	1
<b>Surrogate</b>									
DCB Decachlorobiphenyl	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	93		48 - 142				12/08/14 18:08	12/08/14 23:52	1
Tetrachloro-m-xylene	81		50 - 116				12/08/14 18:08	12/08/14 23:52	1

Lab Sample ID: LCS 500-267588/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267318

Prep Batch: 267588

Analyte	Spike		Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added							
PCB-1016	167		141		ug/Kg		84	59 - 110
PCB-1260	167		163		ug/Kg		98	69 - 120
<b>Surrogate</b>								
DCB Decachlorobiphenyl	%Recovery	Qualifier	Limits					
DCB Decachlorobiphenyl	91		48 - 142					
Tetrachloro-m-xylene	78		50 - 116					

Lab Sample ID: 500-88912-6 MS

Client Sample ID: PP-SB-GP-4, 8-10'

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267318

Prep Batch: 267588

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Added	Result				
PCB-1016	<6.6		185		154	ug/Kg	*	83	59 - 110
PCB-1260	<9.1		185		219	ug/Kg	*	118	69 - 120
<b>Surrogate</b>									
DCB Decachlorobiphenyl	%Recovery	Qualifier	Limits						
DCB Decachlorobiphenyl	89		48 - 142						
Tetrachloro-m-xylene	62		50 - 116						

Lab Sample ID: 500-88912-6 MSD

Client Sample ID: PP-SB-GP-4, 8-10'

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 267318

Prep Batch: 267588

Analyte	Sample		Spike	MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Added	Result						
PCB-1016	<6.6		191		177	ug/Kg	*	93	59 - 110	14	30
PCB-1260	<9.1		191		258 F1	ug/Kg	*	135	69 - 120	17	30
<b>Surrogate</b>											
DCB Decachlorobiphenyl	%Recovery	Qualifier	Limits								
DCB Decachlorobiphenyl	98		48 - 142								
Tetrachloro-m-xylene	71		50 - 116								

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 6010B - Metals (ICP)

**Lab Sample ID:** MB 500-267576/1-A

**Matrix:** Solid

**Analysis Batch:** 267827

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 267576

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20				1.0	0.20	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Barium	<0.11				1.0	0.11	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Cadmium	<0.025				0.20	0.025	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Chromium	<0.12				1.0	0.12	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Lead	<0.15				0.50	0.15	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Selenium	<0.36				1.0	0.36	mg/Kg		12/08/14 16:39	12/09/14 18:21	1
Silver	<0.036				0.50	0.036	mg/Kg		12/08/14 16:39	12/09/14 18:21	1

**Lab Sample ID:** LCS 500-267576/2-A

**Matrix:** Solid

**Analysis Batch:** 267827

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 267576

Analyte	Spike	LCS			%Rec.		
	Added	Result	Qualifier	Unit	D	%Rec	Limits
Arsenic	10.0	9.87		mg/Kg		99	80 - 120
Barium	200	201		mg/Kg		101	80 - 120
Cadmium	5.00	4.88		mg/Kg		98	80 - 120
Chromium	20.0	19.8		mg/Kg		99	80 - 120
Lead	10.0	10.1		mg/Kg		101	80 - 120
Selenium	10.0	9.30		mg/Kg		93	80 - 120
Silver	5.00	4.67		mg/Kg		93	80 - 120

**Lab Sample ID:** 500-88912-6 MS

**Matrix:** Solid

**Analysis Batch:** 267827

**Client Sample ID:** PP-SB-GP-4, 8-10'  
**Prep Type:** Total/NA  
**Prep Batch:** 267576

Analyte	Sample	Sample	Spike	MS			%Rec.		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Arsenic	4.4		11.1	13.1		mg/Kg	⊗	78	75 - 125
Barium	75	V	222	254		mg/Kg	⊗	80	75 - 125
Cadmium	0.17	J	5.56	4.56		mg/Kg	⊗	79	75 - 125
Chromium	14	V	22.2	35.3		mg/Kg	⊗	95	75 - 125
Lead	15		11.1	23.5		mg/Kg	⊗	75	75 - 125
Selenium	0.38	J	11.1	8.44		mg/Kg	⊗	76	75 - 125
Silver	<0.038		5.56	4.21		mg/Kg	⊗	76	75 - 125

**Lab Sample ID:** 500-88912-6 MSD

**Matrix:** Solid

**Analysis Batch:** 267827

**Client Sample ID:** PP-SB-GP-4, 8-10'  
**Prep Type:** Total/NA  
**Prep Batch:** 267576

Analyte	Sample	Sample	Spike	MSD			%Rec.			RPD	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	4.4		11.2	14.3		mg/Kg	⊗	88	75 - 125	9	20
Barium	75	V	225	260		mg/Kg	⊗	82	75 - 125	3	20
Cadmium	0.17	J	5.62	4.74		mg/Kg	⊗	81	75 - 125	4	20
Chromium	14	V	22.5	33.6		mg/Kg	⊗	87	75 - 125	5	20
Lead	15		11.2	36.2	F1 F2	mg/Kg	⊗	188	75 - 125	43	20
Selenium	0.38	J	11.2	8.05	F1	mg/Kg	⊗	72	75 - 125	5	20
Silver	<0.038		5.62	4.29		mg/Kg	⊗	76	75 - 125	2	20

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-88912-6 DU**

**Matrix: Solid**

**Analysis Batch: 267827**

**Client Sample ID: PP-SB-GP-4, 8-10'**  
**Prep Type: Total/NA**  
**Prep Batch: 267576**

Analyte	Sample		DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Arsenic	4.4		4.74		mg/Kg	*	8	20
Barium	75	V	69.7		mg/Kg	*	7	20
Cadmium	0.17	J	0.149	J	mg/Kg	*	13	20
Chromium	14	V	14.1		mg/Kg	*	0.4	20
Lead	15		16.9		mg/Kg	*	11	20
Selenium	0.38	J	<0.39		mg/Kg	*	NC	20
Silver	<0.038		<0.040		mg/Kg	*	NC	20

**Lab Sample ID: MB 500-267263/1-A**

**Matrix: Water**

**Analysis Batch: 268122**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 267263**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	<2.6		10	2.6	ug/L		12/05/14 10:40	12/11/14 12:17	1
Barium	2.04	J	10	1.1	ug/L		12/05/14 10:40	12/11/14 12:17	1
Cadmium	<0.26		2.0	0.26	ug/L		12/05/14 10:40	12/11/14 12:17	1
Chromium	<1.0		10	1.0	ug/L		12/05/14 10:40	12/11/14 12:17	1
Lead	<2.3		5.0	2.3	ug/L		12/05/14 10:40	12/11/14 12:17	1
Selenium	<4.6		10	4.6	ug/L		12/05/14 10:40	12/11/14 12:17	1
Silver	<0.57		5.0	0.57	ug/L		12/05/14 10:40	12/11/14 12:17	1

**Lab Sample ID: LCS 500-267263/2-A**

**Matrix: Water**

**Analysis Batch: 268122**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 267263**

Analyte	Spike		Added	LCS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Arsenic			100	110		ug/L		110	80 - 120
Barium			500	558		ug/L		112	80 - 120
Cadmium			50.0	54.5		ug/L		109	80 - 120
Chromium			200	208		ug/L		104	80 - 120
Lead			100	107		ug/L		107	80 - 120
Selenium			100	105		ug/L		105	80 - 120
Silver			50.0	55.8		ug/L		112	80 - 120

**Lab Sample ID: 500-88912-9 MS**

**Matrix: Water**

**Analysis Batch: 268122**

**Client Sample ID: PP-GW-MW-2**  
**Prep Type: Total Recoverable**  
**Prep Batch: 267263**

Analyte	Sample		Spike	MS		Unit	D	%Rec	Limits
	Result	Qualifier		Added	Result				
Arsenic	<2.6		100	115		ug/L		115	75 - 125
Barium	130	B	500	656		ug/L		105	75 - 125
Cadmium	1.0	J	50.0	56.1		ug/L		110	75 - 125
Chromium	1.3	J	200	200		ug/L		100	75 - 125
Lead	3.9	J	100	109		ug/L		105	75 - 125
Selenium	<4.6		100	109		ug/L		109	75 - 125
Silver	<0.57		50.0	56.8		ug/L		114	75 - 125

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 500-88912-9 MSD										Client Sample ID: PP-GW-MW-2					
Matrix: Water										Prep Type: Total Recoverable					
Analysis Batch: 268122										Prep Batch: 267263					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit				
Arsenic	<2.6		100	112		ug/L		112	75 - 125	3	20				
Barium	130	B	500	652		ug/L		105	75 - 125	1	20				
Cadmium	1.0	J	50.0	55.7		ug/L		109	75 - 125	1	20				
Chromium	1.3	J	200	200		ug/L		99	75 - 125	0	20				
Lead	3.9	J	100	110		ug/L		106	75 - 125	0	20				
Selenium	<4.6		100	109		ug/L		109	75 - 125	0	20				
Silver	<0.57		50.0	55.9		ug/L		112	75 - 125	2	20				

Lab Sample ID: 500-88912-9 DU										Client Sample ID: PP-GW-MW-2					
Matrix: Water										Prep Type: Total Recoverable					
Analysis Batch: 268122										Prep Batch: 267263					
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	Limit				
Arsenic	<2.6			<2.6		ug/L				NC	20				
Barium	130	B		124		ug/L				4	20				
Cadmium	1.0	J		0.819	J F5	ug/L				25	20				
Chromium	1.3	J		<1.0		ug/L				NC	20				
Lead	3.9	J		<2.3		ug/L				NC	20				
Selenium	<4.6			<4.6		ug/L				NC	20				
Silver	<0.57			<0.57		ug/L				NC	20				

### Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-267229/12-A										Client Sample ID: Method Blank					
Matrix: Water										Prep Type: Total/NA					
Analysis Batch: 267546										Prep Batch: 267229					
Analyte	MB Result	MB Qualifier		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac			
Mercury	<0.072			0.20	0.072	ug/L		12/05/14 11:15		12/08/14 10:25		1			

Lab Sample ID: LCS 500-267229/13-A										Client Sample ID: Lab Control Sample					
Matrix: Water										Prep Type: Total/NA					
Analysis Batch: 267546										Prep Batch: 267229					
Analyte	Spike Added		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits							
Mercury	2.00		2.24		ug/L		112	80 - 120							

Lab Sample ID: 500-88912-9 MS										Client Sample ID: PP-GW-MW-2					
Matrix: Water										Prep Type: Total/NA					
Analysis Batch: 267546										Prep Batch: 267229					
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits						
Mercury	<0.072		1.00	1.12		ug/L		112	80 - 120						

TestAmerica Chicago

## QC Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

### Method: 7470A - Mercury (CVAA) (Continued)

<b>Lab Sample ID:</b> 500-88912-9 MSD <b>Matrix:</b> Water <b>Analysis Batch:</b> 267546										<b>Client Sample ID:</b> PP-GW-MW-2 <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267229				
<b>Analyte</b>	Sample	Sample	Spike	MSD	MSD	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>RPD</b>	<b>Limit</b>				
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>									
Mercury	<0.072		1.00	1.12		ug/L	112	80 - 120	0	20				
<b>Lab Sample ID:</b> 500-88912-9 DU <b>Matrix:</b> Water <b>Analysis Batch:</b> 267546										<b>Client Sample ID:</b> PP-GW-MW-2 <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267229				
<b>Analyte</b>	Sample	Sample	Spike	DU	DU	<b>Unit</b>	<b>D</b>	<b>RPD</b>	<b>Limit</b>					
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>									
Mercury	<0.072			<0.072		ug/L		NC	20					

### Method: 7471A - Mercury (CVAA)

<b>Lab Sample ID:</b> MB 500-267712/12-A <b>Matrix:</b> Solid <b>Analysis Batch:</b> 267909										<b>Client Sample ID:</b> Method Blank <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267712				
<b>Analyte</b>	MB	MB	<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>					
	<b>Result</b>	<b>Qualifier</b>												
Mercury	<0.0066		0.017	0.0066	mg/Kg		12/09/14 14:00	12/10/14 09:25	1					
<b>Lab Sample ID:</b> LCS 500-267712/13-A <b>Matrix:</b> Solid <b>Analysis Batch:</b> 267909										<b>Client Sample ID:</b> Lab Control Sample <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267712				
<b>Analyte</b>	Spike	Spike	<b>Result</b>	<b>LCS</b>	<b>Unit</b>	<b>D</b>	<b>%Rec.</b>	<b>Limits</b>						
	Added	Added												
Mercury	0.167		0.178		mg/Kg		106	80 - 120						
<b>Lab Sample ID:</b> 500-88912-6 MS <b>Matrix:</b> Solid <b>Analysis Batch:</b> 267909										<b>Client Sample ID:</b> PP-SB-GP-4, 8-10' <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267712				
<b>Analyte</b>	Sample	Sample	<b>Spike</b>	<b>MS</b>	<b>MS</b>	<b>D</b>	<b>%Rec.</b>	<b>Limits</b>						
	<b>Result</b>	<b>Qualifier</b>												
Mercury	0.019		0.0910	0.129	F1	mg/Kg	*	121	80 - 120					
<b>Lab Sample ID:</b> 500-88912-6 MSD <b>Matrix:</b> Solid <b>Analysis Batch:</b> 267909										<b>Client Sample ID:</b> PP-SB-GP-4, 8-10' <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267712				
<b>Analyte</b>	Sample	Sample	<b>Spike</b>	<b>MSD</b>	<b>MSD</b>	<b>D</b>	<b>%Rec.</b>	<b>RPD</b>	<b>Limit</b>					
	<b>Result</b>	<b>Qualifier</b>												
Mercury	0.019		0.0937	0.127		mg/Kg	*	116	80 - 120					
<b>Lab Sample ID:</b> 500-88912-6 DU <b>Matrix:</b> Solid <b>Analysis Batch:</b> 267909										<b>Client Sample ID:</b> PP-SB-GP-4, 8-10' <b>Prep Type:</b> Total/NA <b>Prep Batch:</b> 267712				
<b>Analyte</b>	Sample	Sample	<b>Spike</b>	<b>DU</b>	<b>DU</b>	<b>D</b>	<b>RPD</b>	<b>Limit</b>						
	<b>Result</b>	<b>Qualifier</b>												
Mercury	0.019		0.0257	F5		mg/Kg	*	30	20					

TestAmerica Chicago

**Lab Chronicle**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-SB-GP-1, 3-4'

Lab Sample ID: 500-88912-1

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 11:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/08/14 23:02	JLH	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		1	267764	12/09/14 21:32	GES	TAL CHI
Total/NA	Prep	3541			267588	12/08/14 18:08	DEA	TAL CHI
Total/NA	Analysis	8082		1	267318	12/09/14 02:36	GMO	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:30	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:29	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-GP-1, 3-4' FD

Lab Sample ID: 500-88912-2

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 11:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/08/14 23:27	JLH	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		1	267764	12/09/14 21:53	GES	TAL CHI
Total/NA	Prep	3541			267588	12/08/14 18:08	DEA	TAL CHI
Total/NA	Analysis	8082		1	267318	12/09/14 02:50	GMO	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:35	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:31	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-GP-2, 1-2'

Lab Sample ID: 500-88912-3

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 12:25	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/08/14 23:52	JLH	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		1	267764	12/10/14 02:57	GES	TAL CHI
Total/NA	Prep	3541			267588	12/08/14 18:08	DEA	TAL CHI
Total/NA	Analysis	8082		1	267318	12/09/14 03:04	GMO	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:39	PJ1	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI

TestAmerica Chicago

**Lab Chronicle**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-SB-GP-2, 1-2'

Lab Sample ID: 500-88912-3

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		5	268133	12/11/14 13:35	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:33	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-GP-3, 1-2'

Lab Sample ID: 500-88912-4

Date Collected: 12/02/14 14:00

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 14:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/09/14 00:17	JLH	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		5	267877	12/10/14 13:28	GLR	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:43	PJ1	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		5	268133	12/11/14 13:51	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:35	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-GP-4, 4-8'

Lab Sample ID: 500-88912-5

Date Collected: 12/02/14 15:45

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 15:45	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/09/14 00:42	JLH	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		10	267877	12/10/14 13:49	GLR	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:48	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:37	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-GP-4, 8-10'

Lab Sample ID: 500-88912-6

Date Collected: 12/02/14 15:50

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 15:50	WRE	TAL CHI

TestAmerica Chicago

**Lab Chronicle**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-SB-GP-4, 8-10'

Lab Sample ID: 500-88912-6

Date Collected: 12/02/14 15:50

Matrix: Solid

Date Received: 12/04/14 09:40

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	267617	12/09/14 09:20	EMA	TAL CHI
Total/NA	Prep	3541			267343	12/05/14 16:30	DEA	TAL CHI
Total/NA	Analysis	8270D		1	267764	12/09/14 22:13	GES	TAL CHI
Total/NA	Prep	3541			267588	12/08/14 18:08	DEA	TAL CHI
Total/NA	Analysis	8082		1	267318	12/09/14 03:17	GMO	TAL CHI
Total/NA	Prep	3050B			267576	12/08/14 16:39	PJH	TAL CHI
Total/NA	Analysis	6010B		1	267827	12/09/14 18:52	PJ1	TAL CHI
Total/NA	Prep	7471A			267712	12/09/14 14:00	RLL	TAL CHI
Total/NA	Analysis	7471A		1	267909	12/10/14 09:40	PFK	TAL CHI
Total/NA	Analysis	Moisture		1	267555	12/08/14 14:56	LWN	TAL CHI

Client Sample ID: PP-SB-TB

Lab Sample ID: 500-88912-7

Date Collected: 12/02/14 00:00

Matrix: Solid

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			267175	12/02/14 00:00	WRE	TAL CHI
Total/NA	Analysis	8260B		50	267513	12/09/14 01:32	JLH	TAL CHI

Client Sample ID: PP-SB-EB

Lab Sample ID: 500-88912-8

Date Collected: 12/03/14 12:30

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 01:57	JLH	TAL CHI
Total/NA	Prep	3510C			267118	12/04/14 16:41	PJ1	TAL CHI
Total/NA	Analysis	8270D		1	267967	12/11/14 01:01	KDL	TAL CHI
Total/NA	Prep	3510C			267254	12/05/14 11:05	SML	TAL CHI
Total/NA	Analysis	8082		1	267308	12/05/14 16:44	GMO	TAL CHI
Total Recoverable	Prep	3005A			267263	12/05/14 10:40	PJH	TAL CHI
Total Recoverable	Analysis	6010B		1	268122	12/11/14 12:24	PJ1	TAL CHI
Total/NA	Prep	7470A			267229	12/05/14 11:15	RLL	TAL CHI
Total/NA	Analysis	7470A		1	267546	12/08/14 11:02	RLL	TAL CHI

Client Sample ID: PP-GW-MW-2

Lab Sample ID: 500-88912-9

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 02:22	JLH	TAL CHI
Total Recoverable	Prep	3005A			267263	12/05/14 10:40	PJH	TAL CHI
Total Recoverable	Analysis	6010B		1	268122	12/11/14 12:28	PJ1	TAL CHI
Total/NA	Prep	7470A			267229	12/05/14 11:15	RLL	TAL CHI

TestAmerica Chicago

**Lab Chronicle**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
 SDG: 25212326.00

Client Sample ID: PP-GW-MW-2

Lab Sample ID: 500-88912-9

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7470A		1	267546	12/08/14 11:08	RLL	TAL CHI

Client Sample ID: PP-GW-MW-2-FD

Lab Sample ID: 500-88912-10

Date Collected: 12/03/14 10:25

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 02:47	JLH	TAL CHI
Total Recoverable	Prep	3005A			267263	12/05/14 10:40	PJH	TAL CHI
Total Recoverable	Analysis	6010B		1	268122	12/11/14 12:59	PJ1	TAL CHI
Total/NA	Prep	7470A			267229	12/05/14 11:15	RLL	TAL CHI
Total/NA	Analysis	7470A		1	267546	12/08/14 11:16	RLL	TAL CHI

Client Sample ID: PP-GW-MW-3

Lab Sample ID: 500-88912-11

Date Collected: 12/03/14 13:15

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 03:12	JLH	TAL CHI
Total Recoverable	Prep	3005A			267263	12/05/14 10:40	PJH	TAL CHI
Total Recoverable	Analysis	6010B		1	268122	12/11/14 13:03	PJ1	TAL CHI
Total/NA	Prep	7470A			267229	12/05/14 11:15	RLL	TAL CHI
Total/NA	Analysis	7470A		1	267546	12/08/14 11:18	RLL	TAL CHI

Client Sample ID: PP-GW-EB

Lab Sample ID: 500-88912-12

Date Collected: 12/03/14 12:45

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 03:38	JLH	TAL CHI
Total Recoverable	Prep	3005A			267263	12/05/14 10:40	PJH	TAL CHI
Total Recoverable	Analysis	6010B		1	268122	12/11/14 13:07	PJ1	TAL CHI
Total/NA	Prep	7470A			267229	12/05/14 11:15	RLL	TAL CHI
Total/NA	Analysis	7470A		1	267546	12/08/14 11:20	RLL	TAL CHI

Client Sample ID: PP-GW-TB

Lab Sample ID: 500-88912-13

Date Collected: 12/03/14 00:00

Matrix: Water

Date Received: 12/04/14 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	267511	12/09/14 04:03	JLH	TAL CHI

TestAmerica Chicago

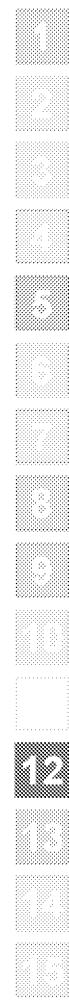
## Lab Chronicle

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
SDG: 25212326.00

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



## Certification Summary

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-1  
SDG: 25212326.00

### Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15 *

\* Certification renewal pending - certification considered valid.

TestAmerica Chicago

# TestAmerica

THE LEADER IN ENVIRON

2417 Bond Street, University  
Phone: 708.534.5200 Fax:



500-88912 COC

Report To Contact: <u>Eric Oelkers</u>	(optional)	Bill To Contact: <u>90 SCS</u>	(optional)
Company: <u>SCS Engineers</u>		Address:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

00-88912

Lab Job #: 300-00112

Chain of Custody Number:

Page 1 of 2

Temperature °C of Cooler: 3.6, 4.2

- Preservative Key**

  1. HCl, Cool to 4°
  2. H<sub>2</sub>SO<sub>4</sub>, Cool to 4°
  3. HNO<sub>3</sub>, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO<sub>4</sub>
  7. Cool to 4°
  8. None
  9. Other

#### Comments

Lab-supplied

### Turnaround Time Required (Business Days)

## Sample Disposal

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

[Return to Client](#)

al by Lab

Archive for

Archive for Months

A fee may be assessed if samples are retained longer than 1 month

Relinquished By <i>Mfr BCK</i>	Company SES	Date 12/31/17	Time 1730	Received By <i>Jeff Jauh</i>	Company SES	Date 12/4/14	Time 0940	Lab Courier [Redacted]
Relinquished By <i>[Signature]</i>	Company [Redacted]	Date [Redacted]	Time [Redacted]	Received By <i>[Signature]</i>	Company [Redacted]	Date [Redacted]	Time [Redacted]	Shipped [Redacted]
Relinquished By [Redacted]	Company [Redacted]	Date [Redacted]	Time [Redacted]	Received By [Redacted]	Company [Redacted]	Date [Redacted]	Time [Redacted]	Handled [Redacted]

Matrix Key

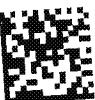
WW - Wastewater	SE - Sediment
W - Water	SO - Scll
S - Soil	L - Leachate
SL - Sludge	WI - Wipe
MS - Miscellaneous	DW - Drinking V
OL - Oil	O - Other
A - Aze	

### **Client Comments**

**Lab Comments:**

# TestAmerica

THE LEADER IN



TESTING

2417 Bond St  
Phone: 708.51484  
5211

500-88912 COC

(optional)

Report To: Eric Oelkers  
 Contact: SCS  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

(optional)

Bill To: c/o SCS  
 Contact: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 PO#/Reference# \_\_\_\_\_

## Chain of Custody Record

Lab Job #: 500-88912Chain of Custody Number: 5Page 2 of 2

Temperature °C of Cooler: \_\_\_\_\_

- Preservative Key
1. HCl, Cool to 4°
  2. H2SO4, Cool to 4°
  3. HNO3, Cool to 4°
  4. NaOH, Cool to 4°
  5. NaOH/Zn, Cool to 4°
  6. NaHSO4
  7. Cool to 4°
  8. None
  9. Other

Client	Client Project #	Preservative	Parameter		Comments
			1	3	
Project Name	Pankratz Property - Madison Brownfield	Parameter	VOC	Rocks & Metals	
Project Location/State	Madison WI		Lab Project #		
Sampler	Meghan Blodgett	Lab PM			
Lab ID	MS/MSD	Sampling	# Containers	Matrix	
9	PP-GW-MW-2	12/3/14 1025	4 W	✓ ✓	
10	PP-GW-MW-2-FD	1025	4 W	✓ ✓	
9	PP-GW-MW-2-MS/MSD	1025	8 W	✓ ✓	
11	PP-GW-MW-3	13/15	4 W	✓ ✓	
12	PP-GW-EB	1245	4 W	✓ ✓	
13	PP-GW-TB	-	2 W	✓	Lab-supplied

## Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By 	Company SCS	Date 12/3/14	Time 1730	Received By 	Company TA	Date 12/4/14	Time 0740	Lab Courier <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Shipped <input type="checkbox"/>
Relinquished By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Received By <input type="checkbox"/>	Company <input type="checkbox"/>	Date <input type="checkbox"/>	Time <input type="checkbox"/>	Hand Delivered <input type="checkbox"/>

Matrix Key	Client Comments	Lab Comments:
WW - Wastewater	SE - Sediment	
W - Water	SO - Soil	
S - Soil	L - Leachate	
SL - Sludge	WI - Wipe	
MS - Miscellaneous	DW - Drinking Water	
OL - Oil	O - Other	
A - Air		

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-88912-1  
SDG Number: 25212326.00

Login Number: 88912

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-88912-2

TestAmerica Sample Delivery Group: 25212326.00

Client Project/Site: Madison Brownfield Pankratz Property

For:

SCS Engineers

2830 Dairy Dr

Madison, Wisconsin 53718

Attn: Mr. Eric Oelkers



Authorized for release by:

12/30/2014 1:25:05 PM

Sandie Fredrick, Project Manager II

(920)261-1660

sandie.fredrick@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Case Narrative

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
SDG: 25212326.00

Job ID: 500-88912-2

Laboratory: TestAmerica Chicago

### Narrative

Job Narrative  
500-88912-2

### Comments

No additional comments.

### Receipt

The samples were received on 12/4/2014 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Detection Summary**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
 SDG: 25212326.00

Client Sample ID: PP-SB-GP-1, 3-4' FD

Lab Sample ID: 500-88912-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.039	J	0.050	0.0075	mg/L	1		6010B	TCLP

Client Sample ID: PP-SB-GP-2, 1-2'

Lab Sample ID: 500-88912-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.2		0.050	0.0075	mg/L	1		6010B	TCLP

Client Sample ID: PP-SB-GP-3, 1-2'

Lab Sample ID: 500-88912-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.40		0.050	0.0075	mg/L	1		6010B	TCLP

Client Sample ID: PP-SB-GP-4, 4-8'

Lab Sample ID: 500-88912-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.17		0.050	0.0075	mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

TestAmerica Chicago

## Method Summary

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
SDG: 25212326.00

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CHI

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

1  
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## Sample Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2

SDG: 25212326.00

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-88912-2	PP-SB-GP-1, 3-4' FD	Solid	12/02/14 11:45	12/04/14 09:40
500-88912-3	PP-SB-GP-2, 1-2'	Solid	12/02/14 12:25	12/04/14 09:40
500-88912-4	PP-SB-GP-3, 1-2'	Solid	12/02/14 14:00	12/04/14 09:40
500-88912-5	PP-SB-GP-4, 4-8'	Solid	12/02/14 15:45	12/04/14 09:40

## Client Sample Results

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-1, 3-4' FD**

**Lab Sample ID: 500-88912-2**

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.039	J	0.050	0.0075	mg/L		12/23/14 14:00	12/29/14 21:56	1

**Client Sample ID: PP-SB-GP-2, 1-2'**

**Lab Sample ID: 500-88912-3**

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.2		0.050	0.0075	mg/L		12/23/14 14:00	12/29/14 22:36	1

**Client Sample ID: PP-SB-GP-3, 1-2'**

**Lab Sample ID: 500-88912-4**

Date Collected: 12/02/14 14:00

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.40		0.050	0.0075	mg/L		12/23/14 14:00	12/29/14 22:42	1

**Client Sample ID: PP-SB-GP-4, 4-8'**

**Lab Sample ID: 500-88912-5**

Date Collected: 12/02/14 15:45

Matrix: Solid

Date Received: 12/04/14 09:40

**Method: 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.17		0.050	0.0075	mg/L		12/23/14 14:00	12/29/14 22:48	1

## Definitions/Glossary

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
 SDG: 25212326.00

### Qualifiers

#### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## QC Association Summary

Client: SCS Engineers

Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2

SDG: 25212326.00

### Metals

#### Leach Batch: 269720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-2	PP-SB-GP-1, 3-4' FD	TCLP	Solid	1311	
500-88912-2 DU	PP-SB-GP-1, 3-4' FD	TCLP	Solid	1311	
500-88912-2 MS	PP-SB-GP-1, 3-4' FD	TCLP	Solid	1311	
500-88912-3	PP-SB-GP-2, 1-2'	TCLP	Solid	1311	
500-88912-4	PP-SB-GP-3, 1-2'	TCLP	Solid	1311	
500-88912-5	PP-SB-GP-4, 4-8'	TCLP	Solid	1311	
LB 500-269720/1-B	Method Blank	TCLP	Solid	1311	

#### Prep Batch: 269887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-2	PP-SB-GP-1, 3-4' FD	TCLP	Solid	3010A	269720
500-88912-2 DU	PP-SB-GP-1, 3-4' FD	TCLP	Solid	3010A	269720
500-88912-2 MS	PP-SB-GP-1, 3-4' FD	TCLP	Solid	3010A	269720
500-88912-3	PP-SB-GP-2, 1-2'	TCLP	Solid	3010A	269720
500-88912-4	PP-SB-GP-3, 1-2'	TCLP	Solid	3010A	269720
500-88912-5	PP-SB-GP-4, 4-8'	TCLP	Solid	3010A	269720
LB 500-269720/1-B	Method Blank	TCLP	Solid	3010A	269720
LCS 500-269887/3-A	Lab Control Sample	Total/NA	Solid	3010A	

#### Analysis Batch: 270425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-88912-2	PP-SB-GP-1, 3-4' FD	TCLP	Solid	6010B	269887
500-88912-2 DU	PP-SB-GP-1, 3-4' FD	TCLP	Solid	6010B	269887
500-88912-2 MS	PP-SB-GP-1, 3-4' FD	TCLP	Solid	6010B	269887
500-88912-3	PP-SB-GP-2, 1-2'	TCLP	Solid	6010B	269887
500-88912-4	PP-SB-GP-3, 1-2'	TCLP	Solid	6010B	269887
500-88912-5	PP-SB-GP-4, 4-8'	TCLP	Solid	6010B	269887
LB 500-269720/1-B	Method Blank	TCLP	Solid	6010B	269887
LCS 500-269887/3-A	Lab Control Sample	Total/NA	Solid	6010B	269887

**QC Sample Results**

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
 SDG: 25212326.00

**Method: 6010B - Metals (ICP)**

**Lab Sample ID: LCS 500-269887/3-A**

**Matrix: Solid**

**Analysis Batch: 270425**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 269887**

Analyte		Spike	LCS	LCS	Unit	D	%Rec.	Limits
		Added	Result	Qualifier			%Rec	
Lead		0.100	0.101		mg/L		101	80 - 120

**Lab Sample ID: LB 500-269720/1-B**

**Matrix: Solid**

**Analysis Batch: 270425**

**Client Sample ID: Method Blank**

**Prep Type: TCLP**

**Prep Batch: 269887**

Analyte	LB	LB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<0.0075		0.050	0.0075	mg/L		12/23/14 14:00	12/29/14 21:37	1

**Lab Sample ID: 500-88912-2 MS**

**Matrix: Solid**

**Analysis Batch: 270425**

**Client Sample ID: PP-SB-GP-1, 3-4' FD**

**Prep Type: TCLP**

**Prep Batch: 269887**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Lead	0.039	J	0.100	0.142		mg/L		103	50 - 150

**Lab Sample ID: 500-88912-2 DU**

**Matrix: Solid**

**Analysis Batch: 270425**

**Client Sample ID: PP-SB-GP-1, 3-4' FD**

**Prep Type: TCLP**

**Prep Batch: 269887**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Lead	0.039	J	0.0382	J	mg/L		2	20

## Lab Chronicle

Client: SCS Engineers  
 Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
 SDG: 25212326.00

**Client Sample ID: PP-SB-GP-1, 3-4' FD**

**Lab Sample ID: 500-88912-2**

Date Collected: 12/02/14 11:45

Matrix: Solid

Date Received: 12/04/14 09:40

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			269720	12/22/14 15:55	MJD	TAL CHI
TCLP	Prep	3010A			269887	12/23/14 14:00	PJH	TAL CHI
TCLP	Analysis	6010B		1	270425	12/29/14 21:56	PJ1	TAL CHI

**Client Sample ID: PP-SB-GP-2, 1-2'**

**Lab Sample ID: 500-88912-3**

Date Collected: 12/02/14 12:25

Matrix: Solid

Date Received: 12/04/14 09:40

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			269720	12/22/14 15:55	MJD	TAL CHI
TCLP	Prep	3010A			269887	12/23/14 14:00	PJH	TAL CHI
TCLP	Analysis	6010B		1	270425	12/29/14 22:36	PJ1	TAL CHI

**Client Sample ID: PP-SB-GP-3, 1-2'**

**Lab Sample ID: 500-88912-4**

Matrix: Solid

Date Received: 12/04/14 09:40

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			269720	12/22/14 15:55	MJD	TAL CHI
TCLP	Prep	3010A			269887	12/23/14 14:00	PJH	TAL CHI
TCLP	Analysis	6010B		1	270425	12/29/14 22:42	PJ1	TAL CHI

**Client Sample ID: PP-SB-GP-4, 4-8'**

**Lab Sample ID: 500-88912-5**

Matrix: Solid

Date Received: 12/04/14 09:40

Prep Type	Batch	Batch	Run	Dilution Factor	Batch	Prepared		Lab
	Type	Method			Number	or Analyzed	Analyst	
TCLP	Leach	1311			269720	12/22/14 15:55	MJD	TAL CHI
TCLP	Prep	3010A			269887	12/23/14 14:00	PJH	TAL CHI
TCLP	Analysis	6010B		1	270425	12/29/14 22:48	PJ1	TAL CHI

**Laboratory References:**

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TestAmerica Chicago

## Certification Summary

Client: SCS Engineers  
Project/Site: Madison Brownfield Pankratz Property

TestAmerica Job ID: 500-88912-2  
SDG: 25212326.00

### Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-15 *

\* Certification renewal pending - certification considered valid.

TestAmerica Chicago

**From:** Fredrick, Sandie  
**Sent:** Monday, December 22, 2014 12:45 PM  
**To:** Healy, Jayne  
**Subject:** FW: TestAmerica report files from 500-88912-1 Madison Brownfield Pankratz Property

Hi Jayne,  
 Can you please scan this into job 500-88912-2?  
 Thanks,  
 Sandie

**SANDRA FREDRICK**  
 Project Manager

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street  
 University Park, IL 60484  
 Tel 920-261-1660  
[sandie.fredrick@testamericainc.com](mailto:sandie.fredrick@testamericainc.com)

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

**HOLIDAY REMINDER:** *TestAmerica Chicago will be closed on Thursday, December 25<sup>th</sup>, Friday December 26<sup>th</sup> and Thursday January 1<sup>st</sup> for the Christmas and New Years holidays. No deliveries will be accepted from FedEx, UPS or drop-offs on these days. The laboratory will not be responsible for samples that are shipped on Wednesday, December 24th or Wednesday, December 31<sup>st</sup> that arrive out of temperature or out of holding time. Additionally, because the 5-day incubation would require our chemists to work on the holidays, BOD samples will not be set up on the preceding Saturdays, December 20<sup>th</sup> and December 27<sup>th</sup>. Samples with short holding times that will arrive during the holiday week should be pre-arranged with your Project Manager.*

**As we approach the holiday season, please know that we are thankful for your business.**

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**From:** Oelkers, Eric [mailto:[EOelkers@scsengineers.com](mailto:EOelkers@scsengineers.com)]  
**Sent:** Friday, December 19, 2014 3:02 PM  
**To:** Fredrick, Sandie  
**Cc:** Blodgett, Meghan  
**Subject:** RE: TestAmerica report files from 500-88912-1 Madison Brownfield Pankratz Property

Hi Sandie,  
 Can you run TCLP lead on samples 500-288912-2, -3, -4, -5.

**Eric Oelkers, PG**  
 Senior Project Manager / Hydrogeologist  
**SCS ENGINEERS**  
 2830 Dairy Drive  
 Madison, WI 53718  
 608.224.2830  
 Direct: 608.216.7341 • Cell: 608.444.3934  
[eoelkers@scsengineers.com](mailto:eoelkers@scsengineers.com)  
[www.scsengineers.com](http://www.scsengineers.com)

**From:** Fredrick, Sandie [mailto:sandie.fredrick@testamericainc.com]  
**Sent:** Thursday, December 11, 2014 2:32 PM  
**To:** Oelkers, Eric; Valcheff, Jess  
**Subject:** TestAmerica report files from 500-88912-1 Madison Brownfield Pankratz Property

Hello Eric,

Attached please find the report files for job 500-88912-1; Madison Brownfield Pankratz Property

Please feel free to contact me if you have any questions.

Thank you.

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

**SANDIE J FREDRICK**

Project Manager II

TestAmerica Chicago

THE LEADER IN ENVIRONMENTAL TESTING

Tel: 920.261.1660

[www.testamericainc.com](http://www.testamericainc.com)

Reference: [212021]

Attachments: 1

**TestAmerica**  
THE LEADER IN ENVIRON  
2417 Bond Street, University  
Phone: 708.534.5200 Fa.  


2417 Bond Street, University  
Phone: 708.534.5200 Fax:



2417 Bond Street, University  
Phone: 708.534.5200 Fax:

2417 Bond Street, University  
Phone: 708.534.5200 Fax:

2417 Bond Street, University  
Phone: 708.534.5200 Fax:

500-88912 CAC

<p>Report To _____          Contact: <u>Eric Oeltus</u>          Company: <u>SCS Engineers</u>          Address: _____          Address: _____          Phone: _____          Fax: _____          E-Mail: _____</p>	<p>(optional)</p>
<p>Bill To _____          Contact: _____          Company: <u>90 SCS</u>          Address: _____          Address: _____          Phone: _____          Fax: _____          PO#/Reference# _____</p>	<p>(optional)</p>

## **Chain of Custody Record**

Lab Job #: 300-68912

Chain of Custody Number:

Page 1 of 2

Temperature °C of Cooler: 3.6, 4.2

#### Turnaround Time Required (Business Days)

### Sample Disposal

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

[Return to Client](#)

al by Lab

Archive for

Archive for  
Monthe

A fee may be assessed if samples are retained longer than 4 months.

Relinquished By <i>Mfr BCK</i>	Company SES	Date 12/3/14	Time 1730	Received By <i>Jeff Jauh TA</i>	Company TA	Date 12/4/14	Time 0940
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Matrix Key WW - Wastewater W - Water S - Soll SL - Sludge MS - Miscellaneous				Client Comments			
				Lab Comments:			
Lab Courier							
Shipped							
Hand Delivered							

# TestAmerica

---

THE LEADER 1



TESTING

2417 Bond St  
Phone: 708.51

484

5211

500-88912 COC

<p>Report To            Contact: <u>Eric Oelkers</u></p> <p>Company: <u>SCS</u></p> <p>Address:</p> <p>Address:</p> <p>Phone:</p> <p>Fax:</p> <p>E-Mail:</p>	<p>(optional)</p> <p>Bill To            Contact:            Company: <u>C/O SCS</u></p> <p>Address:</p> <p>Address:</p> <p>Phone:</p> <p>Fax:</p> <p>PO#/Reference#</p>
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## **Chain of Custody Record**

Lab Job #: 500-88912

Chain of Custody Number: 57

Page 2 of 2

Temperature °C of Cooler:

### ~~Turnaround Time Required (Business Days)~~

## Sample Disposal

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other  
Requested Due Date

Requested by [Redacted] [Redacted] [Redacted] [Redacted] [Redacted]

Relinquished By <i>Jeff Bla</i>	Company 35	Date 12/3/14	Time 1230	Received By <i>Jeff Bla</i>	Company TA	Date 12/4/14	Time 0740	Lab Courier [Redacted]
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Shipped [Redacted]
Relinquished By	Company	Date	Time	Received By	Company	Date	Time	Hand Delivered [Redacted]

Matrix Key	
WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

## **Client Comments**

**Lab Comments:**

## Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 500-88912-2  
SDG Number: 25212326.00

Login Number: 88912

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	